DENON

Hi-Fi AV Surround Amplifier

SERVICE MANUAL

MODEL AVC-1530/1530G

AV SURROUND AMPLIFIER

(Photo: AVC-1530)

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NIPPON COLUMBIA CO., LTD.

SPECIFICATIONS

- **Audio Section**
  (Power amplifier)

Rated output:	**for U.K. model**	**for multi voltage model**
(All properties shown are only for the power amplifier stage.)	Front (main 2ch driven) 70 W + 70 W (8 ohms, 20 Hz – 20 kHz with 0.1% THD)	Front 90 W + 90 W (6 ohms, EIAJ)
	CENTER (center 1ch driven) 70 W (8 ohms, 20 Hz – 20 kHz with 0.1% THD)	Center 90 W (6 ohms, EIAJ)
	REAR (rear 2ch driven) 20 W + 20 W (8 ohms, 1 kHz with 0.5% THD)	Rear 25 W + 25 W (6 ohms, EIAJ)

Output terminals:
Front: 6 to 16 ohms
Center: 6 to 16 ohms
Rear: 6 to 16 ohms

Line input (Each line input – FRONT SP OUT)
Input sensitivity / impedance: 150 mV/47 k ohms PHONO (MM): 2.5 mV / 47 kohms
Frequency response: 10 Hz to 50 kHz: ±3 dB
Tone control range: BASS: ±10 dB at 100 Hz
TREBLE: ±10 dB at 10 kHz
Signal-to-noise ratio 92 dB
Phono equalizer (PHONO input – REC OUT)
RIAA deviation: ±1 dB (20 Hz to 20 kHz)
Signal-to-noise ratio: 74 dB (A weighting, with 5 mV input)
Rated output / Maximum output: 150 mV/8 V
Distortion factor: 0.03% (1 kHz, 1 V)

- **Video Section**

Standard video jacks
Input and output level / impedance: 1 Vp-p/75 ohms
Frequency response: 3 Hz to 8 MHz ±3 dB
S-Video output jacks
Input and output level / impedance:
Y (brightuess) signal: 1Vp-p/75 ohms
C (color) signal: 0.286 Vp-p/75 ohms
Frequency response: 3 Hz to 8 MHz ±3 dB

- **General**

Power supply: AC 240 V, 50 Hz (for U.K. model)
AC 110/220 V, 50/60 Hz (for multi-voltage model)
Power consumption: 230 W (for U.K. model)
210 W (for multi-voltage model)
Maximum external dimensions: 434 (W) × 142 (H) × 337 (D) mm (17-3/32" × 5-19/32" × 13-17/64") (AVC-1530)
470 (W) × 143 (H) × 337 (D) mm (18-1/2" × 5-5/8" × 13-17/64") (AVC-1530G)
Weight: 9.6 kg (21 lbs 3 oz) (AVC-1530) 10.4 kg (22 lbs 15 oz) (AVC-1530G)

- **Remote control unit**

System remote control
RC-167:

Total buttons:	41
DENON system code	
Tuner:	2 buttons
CD player:	6 buttons
Cassette deck:	6 buttons
AVC-1530/1530G fixed codes:	27 buttons
Batteries:	R6P/AA Type (two batteries)
External dimensions:	60 (W) × 175 (H) × 18 (D) mm
Weight:	120 g (Approx. 4 oz) (including batteries)

* For purposes of improvement, specifications and design are subject to change without notice.

1 INTRODUCTION

SAFETY PRECAUTIONS

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION

TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

ATTENTION

POUR PREVENIR LES CHOCS ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.

- **FOR UNITED KINGDOM MODEL ONLY**

CONNECTING THE MAINS PLUG:
This unit operates from a 240V ac 50 Hz mains supply.

Fit a proper mains plug to the mains lead of this equipment. If a 13 amp (BS1363) plug is used, a 5 amp fuse must be fitted. The 13 amp fuse supplied in a new plug must NOT be used. If any other type of plug is used, a 5 amp fuse must to fitted either in the plug or adaptor or at the distribution board.

IMPORTANT

The wires in the mains lead are coloured in accordance with the following code:
Blue: Neutral
Brown: Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

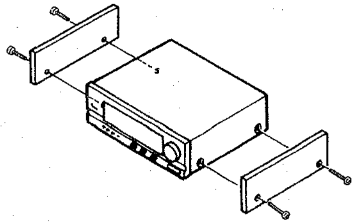
The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured red.

DO NOT MAKE ANY CONNECTION TO THE LARGER PIN MARKED WITH THE LETTER E OR BY THE SYMBOL ⏚ OR COLOURED GREEN OR GREEN-AND-YELLOW.

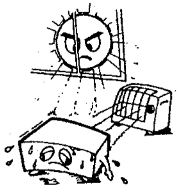
Disconnect the mains plug from the supply socket when not in use.

For models with wood sides: (AVC-1530G ONLY)



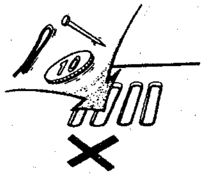
If the wood sides are removed, the top cabinet cannot be reinstalled using the same screws.
Consult your store of purchase or a DENON Overseas Service Center.

NOTE ON USE

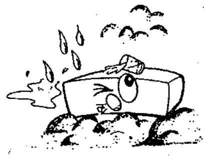


Be careful of high temperatures
- Do not place the set in a location where it will be exposed to direct sunlight or near a heating appliance.

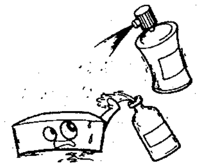
Caution on rack/cabinet installation
- Avoid installing the set in a closed-type rack.
- When installing in a rack or cabinet, provide a sufficiently large ventilation opening to promote heat radiation.



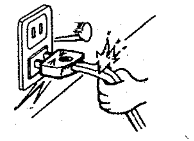
Do not allow foreign matter into the equipment
- Be especially careful of needles, hair pins, and coins getting into the set.



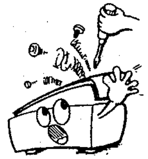
Caution on humidity, water, and dust
- Do not place the set in a location where there is high humidity or a lot of dust.
  Flower vases or other items containing water should not be placed on top of the set.



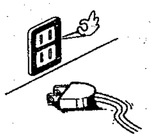
Care of the case
- Avoid the use of pesticides near the set as well as wiping the case with benzine, thinner or other solvents since they may cause a change in quality or color. Use a soft cloth when wiping away dirt and follow the instructions carefully when using chemically treated cloths.



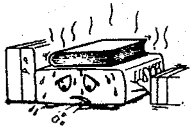
Care with the power cord
- When removing the plug from the receptacle, do not pull the power cord; be sure to hold the plug when removing it.



Do not open the case
- Opening the top cover or the bottom plate of the case and inserting your hand is dangerous. Do not open the case.
  If some trouble arises with the performance of the set, remove the power plug soon and contact the store where the set was purchased or a nearby dealer.



During your absence
- When not using the set for an extended period such as when taking a trip, be sure to disconnect the plug from the receptacle.



For sets with ventilation holes

Do not block the ventilation holes of the set
- Blocking of the ventilation holes will lead to damage of the set.
- The ventilation holes are very important for heat radiation from within the set. Care must be taken since placing an object against the holes will result in an extreme rise of temperature within the set.

- **We greatly appreciate your purchase of the AVC-1530/1530G.**
- **To be sure you take maximum advantage of all the features the AVC-1530/1530G has to offer, read these instructions carefully and use the set properly. Be sure to keep this manual for future reference should any questions or problems arise.**

• ACCESSORIES

Check that the following parts are included in addition to the main unit:

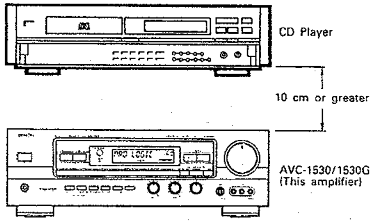
①	Operating instructions	1
②	AC Plug Adapter (for multi voltage model only)	1
③	Remote control unit (RC-167)	1
④	R6P/AA battéries	2

• INSTALLATION PRECAUTIONS

Using this amplifier or other electronic equipment containing microprocessors simultaneously with a tuner or TV may result in noise in the sound or picture.
If this should happen, take the following steps:

- Install the amplifier as far as possible from the tuner or TV set.
- Keep the antenna lines of the tuner or TV as far as possible from the amplifier's power cord and connection cables.
- This problem is especially frequent when using indoor antennas or 300 ohm feeder lines. We recommend using outdoor antennas and 75 ohm coaxial cables.

A note on stacking


CD Player
10 cm or greater
AVC-1530/1530G
(This amplifier)

For cooling purposes, do not place another AV component directly on top of the amplifier. Be sure to leave a space of at least 10 cm.

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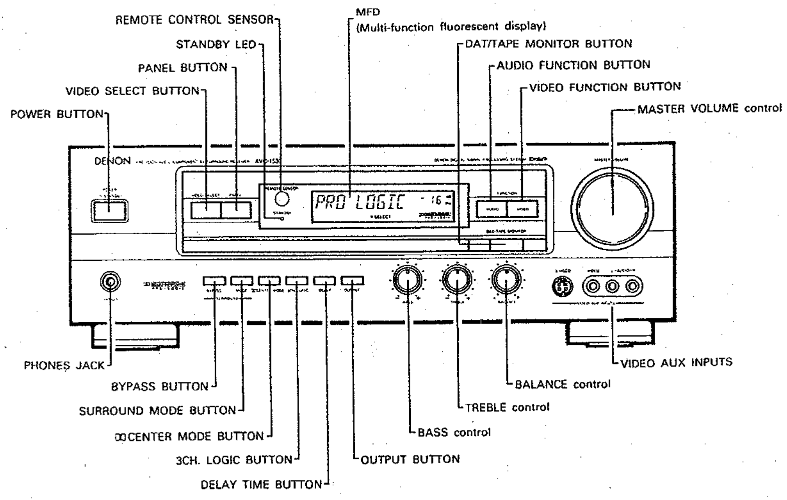
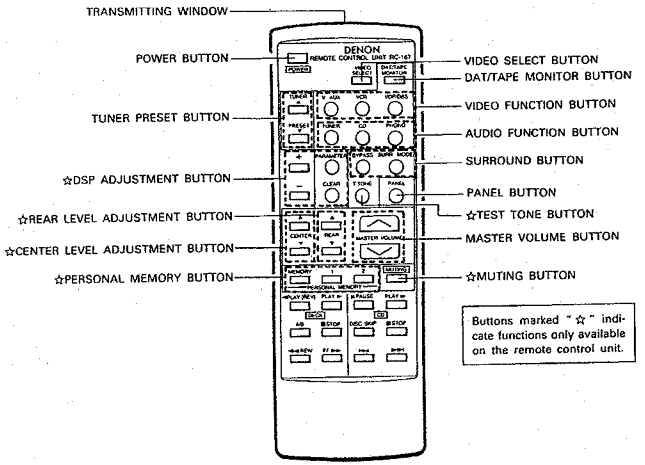
2 NAMES OF PARTS – 1
(Front Panel and Remote Control Unit)


REMOTE CONTROL SENSOR
STANDBY LED
PANEL BUTTON
VIDEO SELECT BUTTON
POWER BUTTON
MFD
(Multi-function fluorescent display)
DAT/TAPE MONITOR BUTTON
AUDIO FUNCTION BUTTON
VIDEO FUNCTION BUTTON
MASTER VOLUME control
DENON
PRO LOGIC
PHONES JACK
BYPASS BUTTON
SURROUND MODE BUTTON
ꝏCENTER MODE BUTTON
3CH. LOGIC BUTTON
DELAY TIME BUTTON
OUTPUT BUTTON
BASS control
TREBLE control
BALANCE control
VIDEO AUX INPUTS

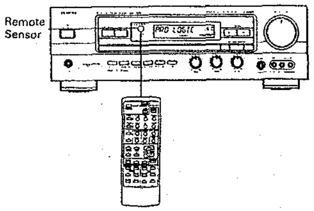

TRANSMITTING WINDOW
POWER BUTTON
TUNER PRESET BUTTON
☆DSP ADJUSTMENT BUTTON
☆REAR LEVEL ADJUSTMENT BUTTON
☆CENTER LEVEL ADJUSTMENT BUTTON
☆PERSONAL MEMORY BUTTON
DENON
REMOTE CONTROL UNIT RC-167
VIDEO SELECT BUTTON
DAT/TAPE MONITOR BUTTON
VIDEO FUNCTION BUTTON
AUDIO FUNCTION BUTTON
SURROUND BUTTON
PANEL BUTTON
☆TEST TONE BUTTON
MASTER VOLUME BUTTON
☆MUTING BUTTON

Buttons marked " ☆ " indicate functions only available on the remote control unit.

3 REMOTE CONTROL UNIT

Following the procedure outlined below, insert the batteries before using the remote control unit.

■ Range of operation of the remote control unit

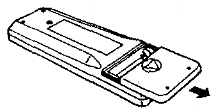


Point the remote control unit at the remote control sensor as shown on the diagram at the left.

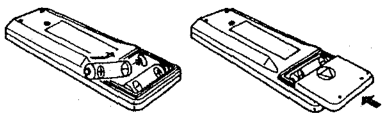
NOTES:
- The remote control unit can be used from a straight distance of approximately 7 meters, but this distance will shorten or operation will become difficult if there are obstacles between the remote control unit and the remote control sensor, if the remote control sensor is exposed to direct sunlight or other strong light, or if operated from an angle.
- Neon signs or other devices emitting pulse-type noise nearby may result in malfunction, so keep the set as far away from such devices as possible.

■ Inserting the batteries

1. Open the bottom cover of the remote control unit and remove the battery cover.



2. Insert the two R6P/AA or UM-3 batteries, matching the ⊕ and ⊖ marks on the batteries with those in the case. Close the bottom cover until it clicks shut.



NOTES
- Use only AA, R6P, UM-3 batteries for replacement.
- Be sure the polarities are correct. (See the illustration inside the battery compartment.)
- Remove the batteries if the remote control transmitter will not be used for an extended period of time.
- If batteries leak, dispose of them immediately. Avoid touching the leaked material or letting it come in contact with clothing, etc. Clean the battery compartment thoroughly before installing new batteries.

■ System codes

The system codes for DENON tape decks, CD players and tuners are set in this remote control unit.

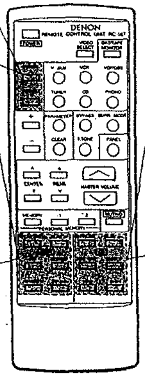
Tuner system buttons

▲ : Preset channel up
▼ : Preset channel down

Tape deck system buttons

These buttons can be used to operate DENON remote controllable components. For details, refer to the component's operating instructions. Note that operation may not be possible for some models.

▶ : Forward play
◀ : Reverse play
■ : Stop
◀◀ : Rewind
▶▶ : Fast-forward
A/B : Switching between decks A and B for double decks



CD system buttons

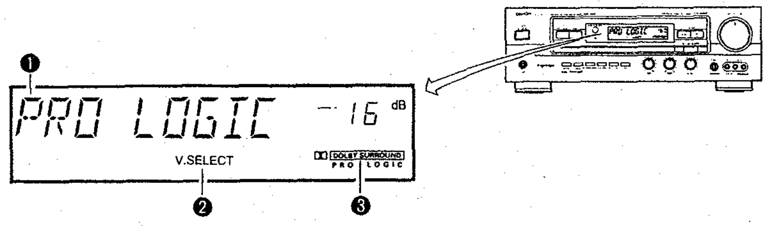
These buttons can be used to operate DENON remote controllable components. For details, refer to the component's operating instructions. Note that operation may not be possible for some models.

▶ : Play
II : Pause
■ : Stop
I◀◀ and ▶▶I : Auto search (reverse and forward)
DISC SKIP : CD changer, disc skip

4 MULTI FUNCTION DISPLAY (MFD)

The MFD indicates the operating modes when operations are performed and when PANEL button is pressed.

■ FLD (Fluorescent Light Display)



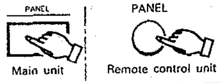
❶ **MULTI FUNCTION DISPLAY**
This displays a maximum of 9 characters.
Normally the reception frequency is displayed when the function is set to tuner, and the surround mode is displayed when the function is set to other positions. The display also indicates various other information according to the buttons pressed.

❷ **V. SELECT (VIDEO INPUT SELECT Indicator)**
This indicator lights when the video monitor output is fixed in the video input select mode.

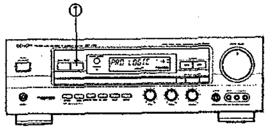
❸ **DOLBY SURROUND Indicator**
This indicator lights when DOLBY PRO LOGIC is selected by pressing the SURROUND MODE button.

■ To check the settings of the different modes:

1. Press the PANEL button.



Either hold the PANEL button in or press it repeatedly to display the settings for the different modes.



■ FLD OFF

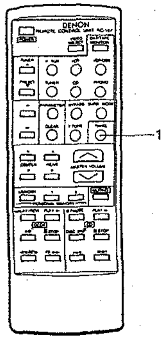
Turning the FLD off:

1. Press and hold in the PANEL button.

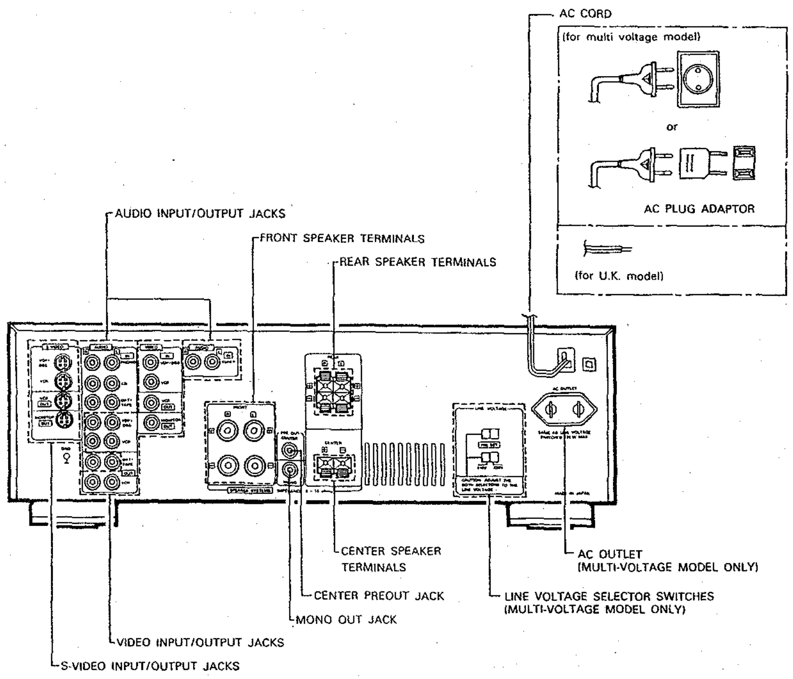
   The FLD display changes continuously and finally turns off. Now when a button is pressed, the related display appears for a few seconds then turns off automatically.

2. Turning the FLD back on:

   Press the PANEL button once again.



5 NAMES OF PARTS – 2 (Rear Panel)


AC CORD
(for multi voltage model)
or
AC PLUG ADAPTOR
(for U.K. model)
AUDIO INPUT/OUTPUT JACKS
FRONT SPEAKER TERMINALS
REAR SPEAKER TERMINALS
CENTER SPEAKER TERMINALS
AC OUTLET (MULTI-VOLTAGE MODEL ONLY)
CENTER PREOUT JACK
LINE VOLTAGE SELECTOR SWITCHES (MULTI-VOLTAGE MODEL ONLY)
MONO OUT JACK
VIDEO INPUT/OUTPUT JACKS
S-VIDEO INPUT/OUTPUT JACKS

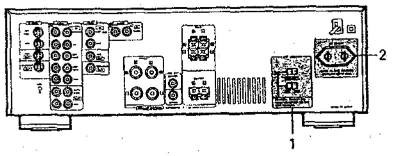
➜ Continued

6 CONNECTIONS

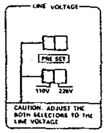
- Always turn off the power of the various components when making connections. Also refer to the operating instructions for the other components.
- Do not plug in the power cord until all connections are completed.

■ MULTI-VOLTAGE MODEL ONLY

Make the following settings before connecting the components.

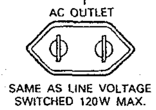


1. Setting the line voltage


LINE VOLTAGE
PRE SET
110V
220V
CAUTION. ADJUST THE BOTH SELECTORS TO THE LINE VOLTAGE

- The customer can set the VOLTAGE SELECTORS on the back panel for appropriate line voltage by using a screwdriver.
- Do not use excessive force in setting the VOLTAGE SELECTOR KNOB – you may damage it.
- If the VOLTAGE SELECTOR KNOB does not turn smoothly, contact your store of purchase.
- Be sure to set both voltage selectors to same position.

2. AC OUTLET


AC OUTLET
SAME AS LINE VOLTAGE
SWITCHED 120W MAX.

Connecting the AC OUTLET

AC OUTLET

- SWITCHED

This AC outlet is controlled by the power switch and Remote Control Unit.
Maximum capacity is 120 W.

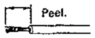
NOTE:
Only use the AC outlet for audio equipment. Never use them for hair driers, TVs or other electrical appliances.

Speaker System Connections

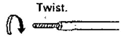
- This amplifier can accommodate connections of a total of five speakers including one set of front speakers, one set of rear speakers, and one center speaker.
- Connect the speaker terminals with the speakers making sure that like polarities are matched (⊕ with ⊕, ⊖ with ⊖). Mismatching of polarities will result in weak central sound, unclear orientation of the various instruments, and the sense of direction of the stereo being impaired.
- When making connections, take care that none of the individual conductors of the speaker cord come in contact with adjacent terminals, with other speaker cord conductors, or with the rear panel.
- **Speaker Impedance**
  - Speakers with an impedance of 6 to 16 ohms can be connected for use as front, center and rear speakers.
  - Using speakers with an impedance other than the specified one may result in damage. Be sure to use speakers of the specified impedance.

Preparing the cord

1. Peel off the sheath.

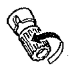


2. Twist the wires.

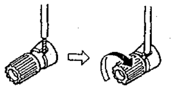


Connecting the front speaker terminals

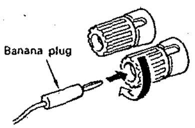
1. Loosen by turning counterclockwise.



2. Insert the cord and tighten by turning clockwise.



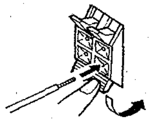
Connecting banana plugs



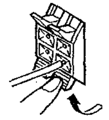
Turn clockwise to tighten, then insert the banana plug.

Connecting the center and rear speaker terminals.

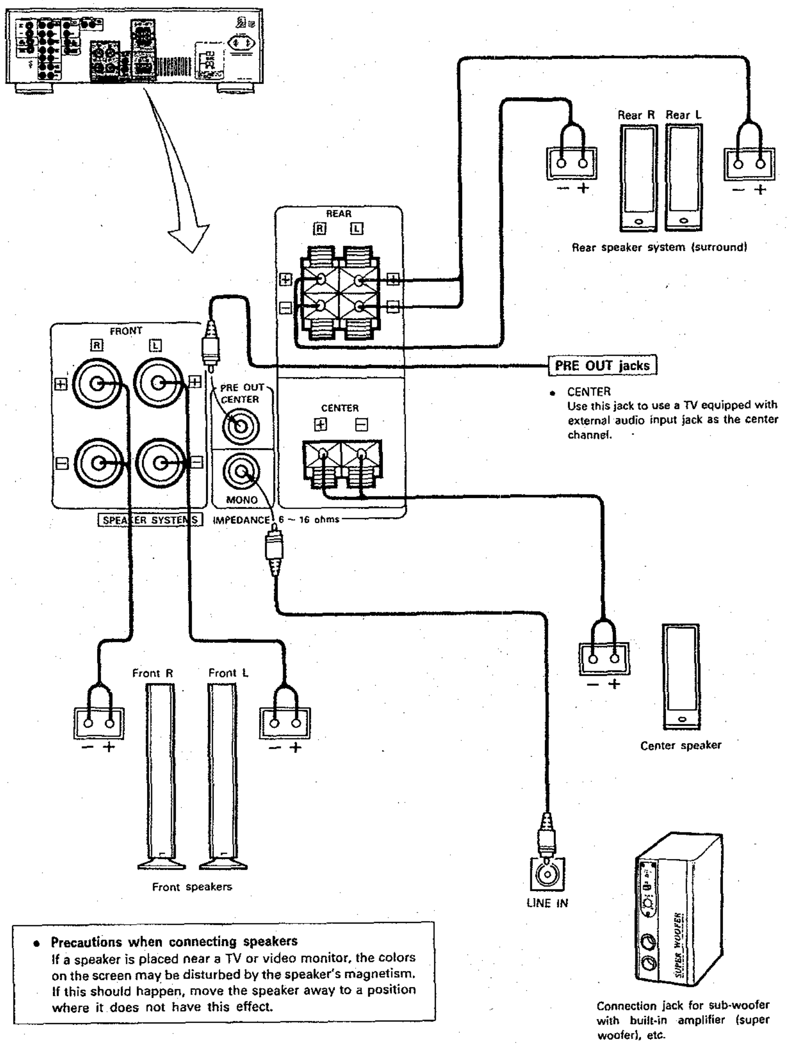
1. Press the lever.



2. Insert the cord and release the lever.



➡ Continued



Rear speaker system (surround)

PRE OUT jacks

- CENTER
  Use this jack to use a TV equipped with external audio input jack as the center channel.

Center speaker

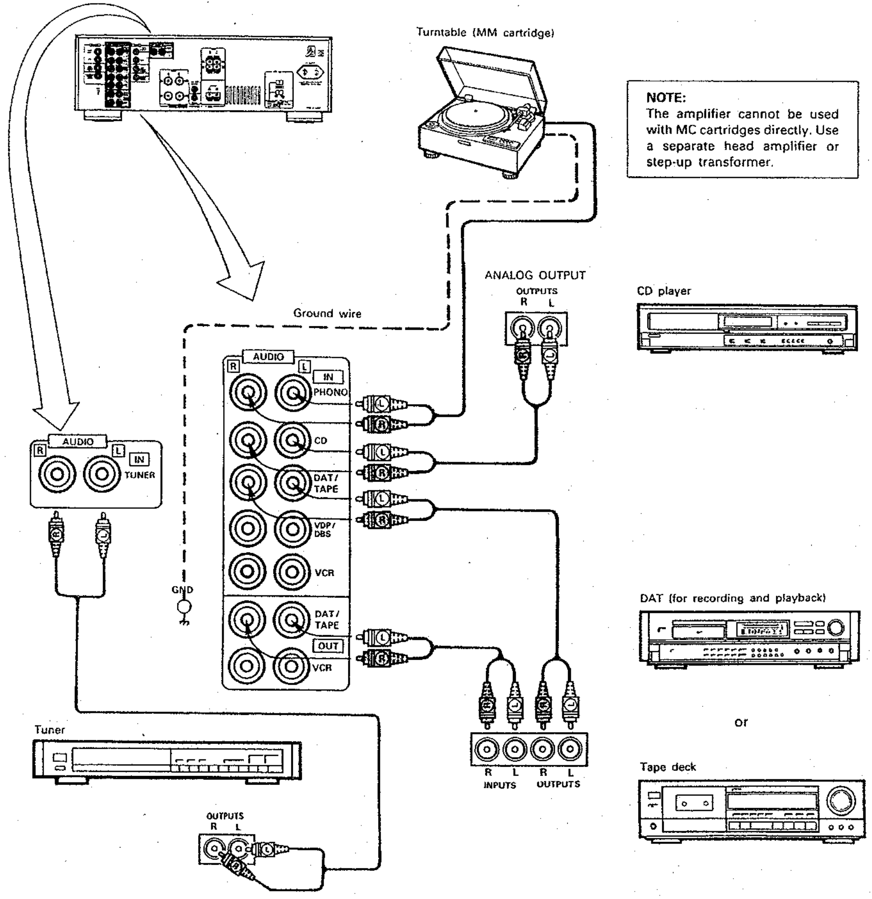
Front speakers

Connection jack for sub-woofer with built-in amplifier (super woofer), etc.

- **Precautions when connecting speakers**
  If a speaker is placed near a TV or video monitor, the colors on the screen may be disturbed by the speaker's magnetism. If this should happen, move the speaker away to a position where it does not have this effect.

Audio Section

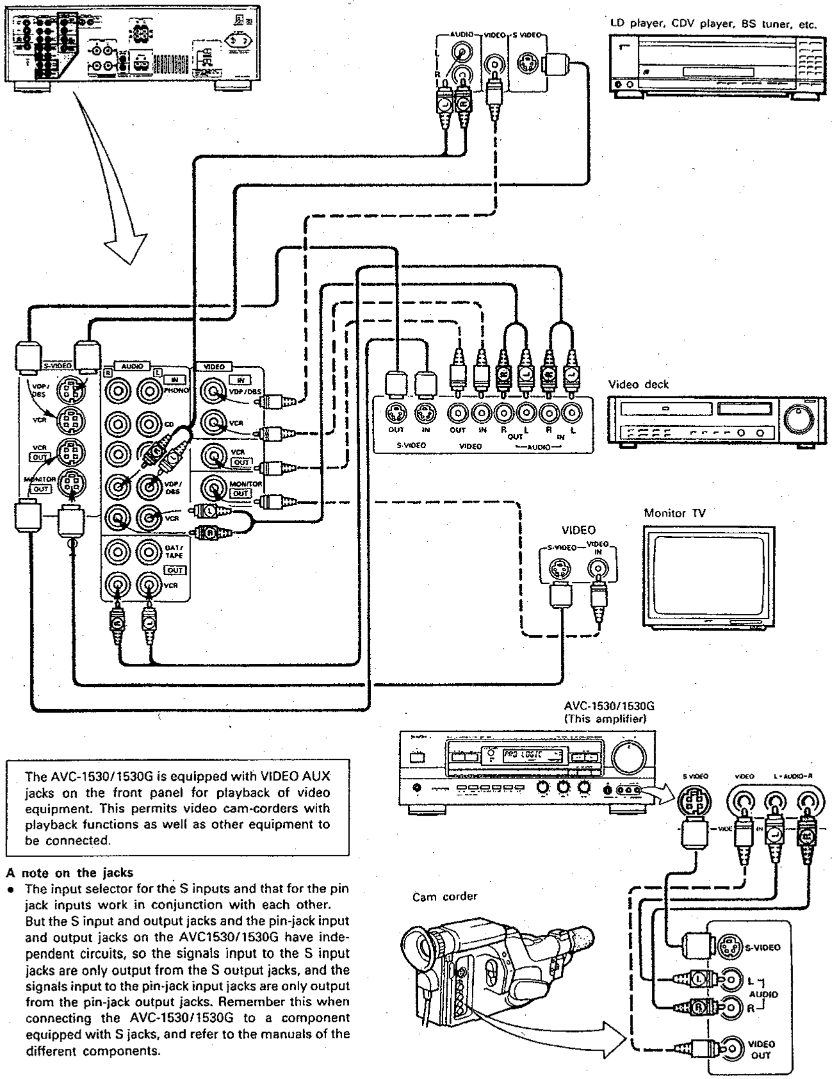
- Do not plug in the power cord until all connections have been completed.
- Be sure to connect the left and right channels properly (left with left, right with right).
- Insert the plugs securely. Incomplete connections will result in the generation of noise.
- Note that binding pin plug cords together with power cords or placing them near a power transformer will result in the introduction of hum or other noise.
- If hum or other noise is produced when the ground wire is connected, disconnect it.
- Noise or humming may be generated if a connected component is used independently without turning the power of the AVC-1530/1530G on. If this happens, turn on the power of the AVC-1530/1530G.


Turntable (MM cartridge)
AUDIO
R
L
IN
TUNER
Ground wire
ANALOG OUTPUT
OUTPUTS
R L
AUDIO
R
L
IN
PHONO
CD
DAT/
TAPE
VDP/
DBS
VCR
DAT/
TAPE
OUT
VCR
GND
CD player
DAT (for recording and playback)
or
Tape deck
R L R L
INPUTS OUTPUTS
Tuner
OUTPUTS
R L

NOTE:
The amplifier cannot be used with MC cartridges directly. Use a separate head amplifier or step-up transformer.

➔ Continued

Video Section


LD player, CDV player, BS tuner, etc.
AUDIO
VIDEO
S VIDEO
R
L
S-VIDEO
VDP/
DBS
VCR
VCR
OUT
MONITOR
OUT
AUDIO
R
L
IN
PHONO
CD
VDP/
DBS
VCR
DAT/
TAPE
OUT
VCR
VIDEO
IN
VDP/DBS
VCR
VCR
OUT
MONITOR
OUT
Video deck
OUT IN OUT IN R L R L
S-VIDEO VIDEO OUT IN
AUDIO
VIDEO
S-VIDEO
VIDEO
IN
Monitor TV
AVC-1530/1530G
(This amplifier)
S VIDEO
VIDEO
L-AUDIO-R
Cam corder
S-VIDEO
L
AUDIO
R
VIDEO
OUT

The AVC-1530/1530G is equipped with VIDEO AUX jacks on the front panel for playback of video equipment. This permits video cam-corders with playback functions as well as other equipment to be connected.

A note on the jacks

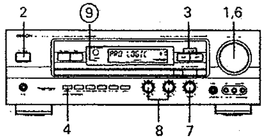
- The input selector for the S inputs and that for the pin jack inputs work in conjunction with each other.
  But the S input and output jacks and the pin-jack input and output jacks on the AVC1530/1530G have independent circuits, so the signals input to the S input jacks are only output from the S output jacks, and the signals input to the pin-jack input jacks are only output from the pin-jack output jacks. Remember this when connecting the AVC-1530/1530G to a component equipped with S jacks, and refer to the manuals of the different components.

7 PLAYBACK

■ Preparations for Playback

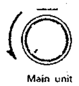
Check the connections

- Check that all connections are proper, referring to the connections diagrams (pages 9 to 13).


2
⑨
3
1,6
PRO LOGIC
4
8
7

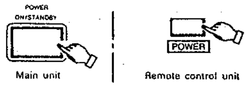
■ Playing the program source (normal stereo playback)

1. Set the MASTER VOLUME control to the minimum.



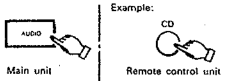
2. Press the POWER button to turn the power on.

   The muting mode is set for several seconds, after which the STANDBY LED ⑨ flashes for several seconds.


POWER
ON/STANDBY
Main unit
POWER
Remote control unit

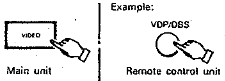
3. Select the source to be played.

Audio function button


AUDIO
Main unit
Example:
CD
Remote control unit

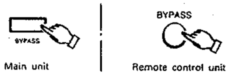
Main unit	Remote control unit
PHONO ↓ CD ↓ TUNER The source switches as shown above MFD.	PHONO, CD or TUNER can be selected directly.

Video function button


VIDEO
Main unit
Example:
VDP/DBS
Remote control unit

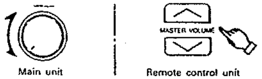
Main unit	Remote control unit
VDP/DBS ↓ VCR ↓ V-AUX The source switches as shown above MFD.	VDP/DBS, VCR and V-AUX can be selected directly.

4. Press the BYPASS button.


BYPASS
Main unit
BYPASS
Remote control unit

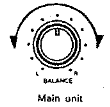
5. Start playback of the program source. For instructions, refer to the source's operating instructions.

6. Adjust the volume.


Main unit
MASTER VOLUME
Remote control unit

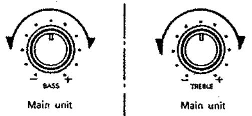
Main unit	Remote control unit
Turn the control clockwise to increase the volume, counterclockwise to decrease it.	Press the [Λ] button to increase the volume, the [V] button to decrease it.

7. Adjust the left/right balance.

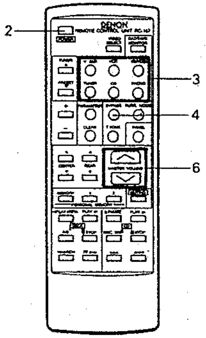

L
R
BALANCE
Main unit

Turn the control counterclockwise to reduce the volume of the right channel, clockwise to reduce the volume of the left channel.

8. Adjust the tone.


BASS
Main unit
TREBLE
Main unit

Bass	Treble
Turn the control clockwise to increase the bass, counterclockwise to decrease it.	Turn the control clockwise to increase the treble, counterclockwise to decrease it.



NOTE:
The sound may be interrupted if switches are operated during playback. This is because the muting circuit is activated to prevent switching noise.

■ Simulcast playback (playing different video and audio sources simultaneously)

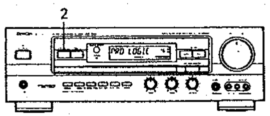
1. Follow steps 1 to 3 under "Playing the program source".
2. Select the desired video program source.

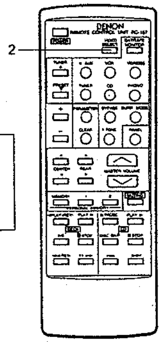
VIDEO SELECT
Main unit
VIDEO SELECT
Remote control unit

VDP/DBS
↓
VCR
↓
V-AUX

The source switches as shown above.

3. Follow steps 4 to 8 under "Playing the program source".



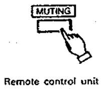


Cancelling simulcast playback
- Press the VIDEO SELECT button again.
- Press the video function button on the main unit or remote control unit.

■ Using the muting function

Use this to turn off the audio output temporarily.

1. Press the MUTING button.

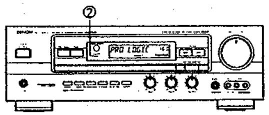

MUTING
Remote control unit

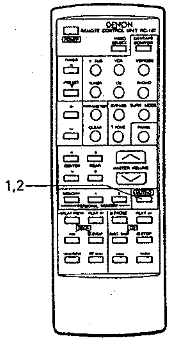
This function can only be set from the remote control unit.

The STANDBY LED ② flashes when the muting function is set.

2. Press the MUTING button again.

   The muting function is cancelled.





8 RECORDING

Recording the program source

(recording the source currently being monitored)

1. Follow steps 1 to 3 under "Playing the program source".
2. Start recording on the tape or video deck.

   For instructions, refer to the component's operating instructions.

NOTES:

1. The audio signals selected with the audio or video function button are output from the DAT/TAPE REC OUT jacks.
2. The recording source switches if the audio function, video function, personal memory "1" or "2" buttons are pressed during recording. Do not press these buttons during recording.

Simultaneous recording

The signals of the source selected with the function selector button are output simultaneously to the DAT/TAPE and VCR REC OUT jacks. If a total of two tape and/or video decks are connected and set to the recording mode, the same source can be recorded simultaneously on both decks.

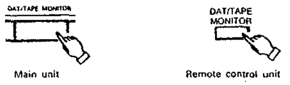
In addition, if the TAPE MONITOR (DAT/TAPE) button is pressed, the audio signals from the tape deck are output to the VCR AUDIO REC OUT jacks.

9 TAPE MONITOR FUNCTION

When playing a DAT or tape deck

Use this function to switch between the DAT or tape deck and the input (source) selected with the audio or video function buttons.

1. Follow steps 1 and 2 under "Playing the program source".
2. Select the deck to be played.



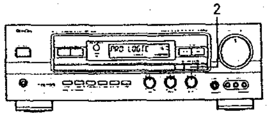
DAT/TAPE

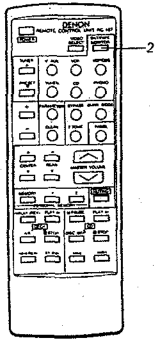
↕

SOURCE

The source switches as shown at the left.

3. Follow steps 5 to 8 under "Playing the program source".

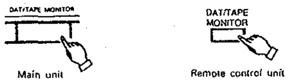




Monitoring the recording on a three-headed tape deck

The sound actually being recorded can be monitored during recording when a three-headed tape deck is used.

1. Select the deck to be monitored.



DAT/TAPE

↕

SOURCE

The source switches as shown at the left.

2. Follow steps 1 to 3 under "Playing the program source".
3. Start recording on the tape deck. For instructions, refer to the component's operating instructions.
4. Press the three-headed tape deck's source/tape button to monitor the recording.

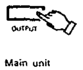
NOTE:

- Also refer to the three-headed tape deck's operating instructions.

10 USING HEADPHONES

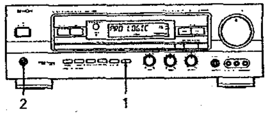
The sound from the speakers can be turned off using the OUTPUT button to listen to the sound over the headphones only, for example at night.

1. Press the OUTPUT button.



"H/P ONLY" appears on the MFD.

2. Insert the headphones' plug into the PHONES jack.



Cancelling

Either press the OUTPUT button again or press the POWER button to turn the power off.

11 SURROUND PLAYBACK

■ DSP modes

The AVC-1530/1530G is equipped with a DSP (Digital Signal Processor) for the surround processing of digital signals. The DSP lets you enjoy surround sound with a greater sense of reality to match the listening room or software.

- **Surround playback using the DSP:**
  In these mode, signals are output to the center and rear speakers as well for four- or five-channel playback.

The surround modes are as follows:

1	Dolby Pro Logic	Use this when playing program sources recorded in Dolby Surround.
2	Wide Screen	Use this to enjoy program sources with the atmosphere of a movie theater, recorded in Dolby Surround.
3	Live	Use this to enjoy program sources with the atmosphere of a live performance, recorded in Dolby Surround.
4	Mono movie	In this mode, a sense of expansion is added to monaural audio sources. This mode is best suited for playing old movies or movie tapes recorded in monaural.
5	Classic concert	This mode simulates the sound of a large concert hall. It is suited for classical music, etc.
6	Rock concert	This mode is best for playing rock, popular music, etc.
7	Stadium	This mode simulates the sound field of an outdoor stadium.

*** These effects may not be very pronounced for some sources.**
If this is the case, try other modes, not relying too much on their names, and find the mode you like best.

*** To adjust the speaker balance for the different surround modes, first adjust for the Dolby Pro Logic Surround mode as explained on page 22, then use the position of the cener level and rear level controls at this time as a guide to adjust the balance for that surround mode.**

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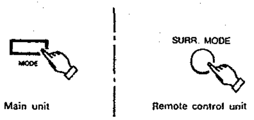
➡ Continued

■ Using Dolby Pro Logic Surround

• Speaker disposition and the Dolby Pro Logic Center mode

Ideally, center speakers should be used when playing sources in Dolby Pro Logic Surround. Select the center mode according to your speaker system.

1. Set the Dolby Pro Logic mode.



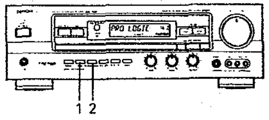
2. Select the ◻◻ center mode.

◻◻CENTER MODE

Main unit

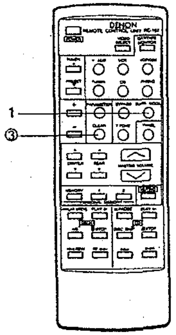
→NORMAL → PHANTOM → WIDE →

The mode changes as shown above.

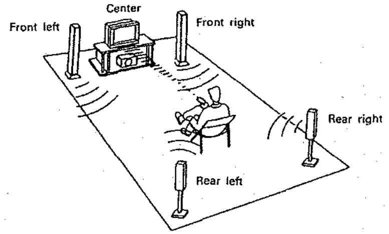


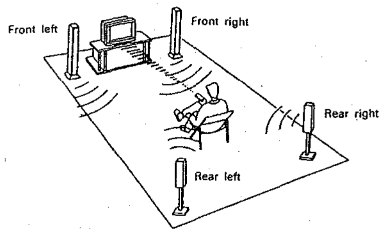
Also select the center mode according to your speaker system when using the Wide Screen and Live modes.

Once the center mode is set, there is no need to readjust it unless you change the speaker system or the listening room. However, when the CLEAR button ③ is pressed, the mode changes as shown on the table on Page 27. In this case, reset the center mode.



Center Mode





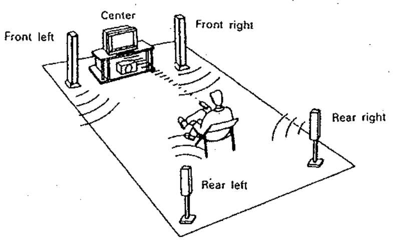
NORMAL mode

Normal mode: This mode is suited for an arrangement in which the center channel speaker is smaller than the left and right speakers. Signals below 100 Hz which have almost no effect on directional orientation are distributed to the left and right channels, whereas the center channel outputs signals greater than 100 Hz. As a result, the bass of the left and right channels increases the apparent deepness of the sound.

PHANTOM mode

Phantom mode: Use this mode when center channel speaker is not used. A directional emphasis circuit provides signal reproduction which is electrically oriented to the center and this provides an exciting sound field for your enjoyment.

Center Mode


Center
Front left
Front right
Rear right
Rear left

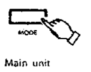
WIDE mode

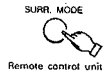
Wide mode: This mode is suited for an arrangement in which the center channel speaker is of the same grade as the left and right speakers. The entire sound band from low region to high is output to the center channel to provide an exciting sound field for your enjoyment.

• Dolby 3CH. Logic (three-channel logic mode)

Select this mode when not using rear speakers.

1. Set the Dolby Pro Logic mode.


MODE
Main unit


SURR. MODE
Remote control unit

2. Press the 3CH. LOGIC button.

3CH LOGIC
Main unit

3CH. LOGIC
↕
PRO LOGIC

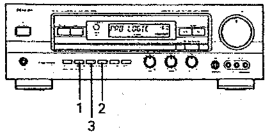
The mode changes as shown at the left.

3. Select the center mode according to your speaker system.

CENTER MODE
Main unit

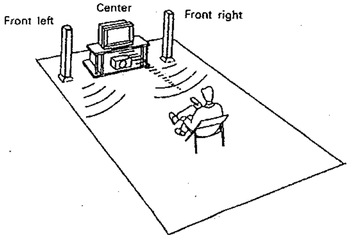
NORMAL ⟷ WIDE

The mode changes as shown above.



NOTE:
The center mode cannot be set to the Phantom mode when the 3CH Logic mode is set.

3CH. LOGIC MODE


Center
Front left
Front right

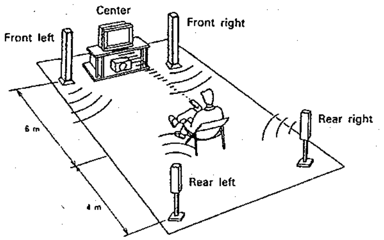
3CH. LOGIC MODE

Three-channel logic mode: Use this mode when rear channel speakers are not used. The rear channel information is reproduced by the front speakers.

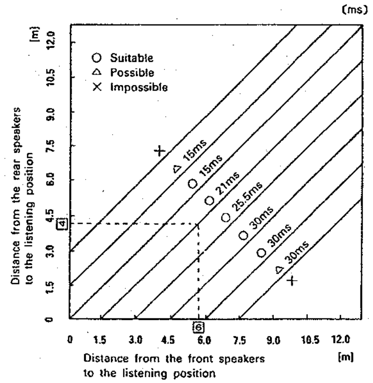
➡ Continued

• Setting the delay time

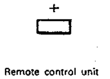
The optimum delay time will differ depending on the listening position. Referring to the chart at right, set the optimum delay time for your room's space and seating position. For example, when the distance from the front speakers to the listening position is 6 m and that from the rear speakers to the listening position is 4 m, the optimum delay time will be 21 ms. The variable range of the delay time differs depending on the mode.
For details about the variable range, see Page 25.


Center
Front left
Front right
Rear right
Rear left
6 m
4 m

Listening position and optimum delay time for playback with Dolby Pro Logic surround

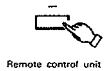


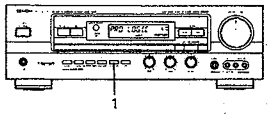
1. To increase the delay time:

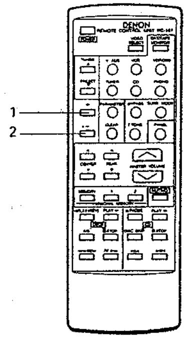

+
Remote control unit

DELAY TIME
Main unit

2. To decrease the delay time:


–
Remote control unit





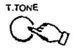
- The delay time can be set between the range of 15.0ms to 30ms in steps of 1.5ms.
- Once the delay time is set, there is no need to readjust it unless you change the speaker system or the listening room. However, when the CLEAR button is pressed, the mode changes as shown on the table on Page 27. In this case, reset the center mode.

• Speaker volume adjustment and Dolby Pro Logic mode

To obtain the maximum surround effect, use the test tones to adjust the volume and balance of the speakers for the best balance for the listening position and so that the sound from all the speakers is heard at the same level.

Auto mode

1. Press the T.TONE button.



Remote control unit

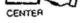
Test tones are produced from the speakers in the order shown below, at 4 second intervals for the first two cycles, 2 second intervals after that.

→ FL → C → FR → S →

For the Dolby 3CH Logic mode:

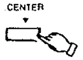
→ FL → C → FR →

2. To increase the level of the center speakers:



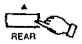
Remote control unit

3. To decrease the level of the center speakers:



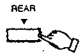
Remote control unit

4. To increase the level of the rear speakers:



Remote control unit

5. To decrease the level of the rear speakers:



Remote control unit

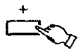
Manual mode

6. Switch to the manual mode.

Remote control unit

Auto mode ←→ manual mode
The mode switches as shown above.

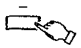
7. To emit the test tones in the clockwise direction.



Remote control unit

→ FL → C → FR → S →

8. To emit the test tones in the counterclockwise direction.



Remote control unit

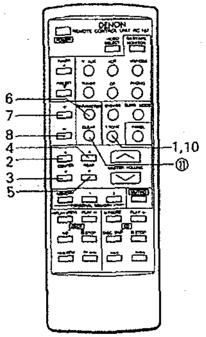
← FL ← C ← FR ← S ←

9. Follow steps 2 to 5 for the auto mode to adjust the level of the different speakers.

Cancelling

10. Press the T.TONE button again.

Remote control unit



NOTES:

- When the T.TONE button is pressed, the auto mode is set and test tones are produced starting from the front left channel.
- In the auto mode, the test tone will not move on to the next channel when it is being emitted from the center channel and the level of the center speakers is being adjusted, or when it is being emitted from the rear channel and the level of the rear speakers is being adjusted. It only moves on to the next channel approximately two seconds after the level key has been released.
- When the mode is switched from the auto mode to the manual mode, the test tone is emitted starting from the channel from which it was last being emitted in the auto mode.

The level of the center and rear channels can be adjusted from 0dB to −24dB in steps of 2dB.

Once the level of the center and rear channels is set, there is no need to readjust it unless you change the speaker system or the listening room. However, when the CLEAR ⑪ button is pressed, the mode changes as shown on the table on Page 27. In this case, reset the center mode.

In other surround modes, adjust the balance based on the adjustment made in the Dolby Pro Logic mode. The balance may not be optimum for some sources, so readjust it as necessary.

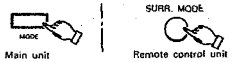
➜ Continued

■ Other DSP Surround Modes

• Using the directivity emphasis circuit and DSP surround

Use this to play sources recorded in Dolby Stereo and Dolby Surround with even greater power.
(The directivity emphasis circuit detects the signals with the dominant direction from the level and phase of the left and right channels and produces a sharp acoustic image and sense of direction.)

1. When playing movies, set the Wide Screen mode.
When playing music, set the Live mode.



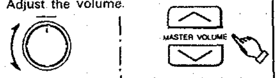
Main unit | Remote control unit

⇨ WIDE SCREEN ← PRO LOGIC ← STADIUM
⇨ LIVE → MONO MOVIE → CLASSIC → ROCK → STADIUM

2. Set the center mode.
Set to the center mode set in the Dolby Pro Logic mode.

3. Start playing the movie or music.

4. Adjust the volume.

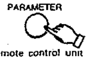


Main unit | Remote control unit

5. Adjust the level of the center and rear channels.
Adjust the levels according to the source, using the Dolby Pro Logic settings as reference.

Adjusting the delay time

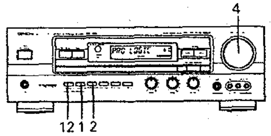
6. Select the delay time mode.



Remote control unit

DELAY ←→ EFFECT LEVEL
The parameter switches as shown above.

7. Set the delay time following the procedure on Page 21.



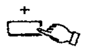
Adjusting the effect level

8. Select the effect level mode.

Remote control unit

DELAY ←→ EFFECT LEVEL
The parameter switches as shown above.

9. To increase the effect level.



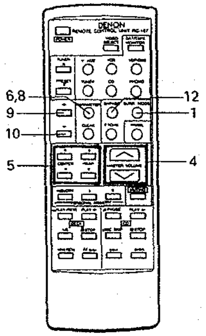
Remote control unit

10. To decrease the effect level.

Remote control unit

Other adjustments

11. Follow steps 6 to 8 under "Playing the program source" on Page 14.



• DSP surround playback

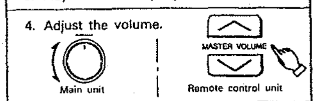
1. Select the desired surround mode.

Main unit | Remote control unit

⇨ MONO MOVIE → CLASSIC → ROCK → STADIUM → PRO LOGIC → WIDE SCREEN → LIVE
⇨ CLASSIC
⇨ ROCK
⇨ STADIUM

3. Play the desired program source.

4. Adjust the volume.



Main unit | Remote control unit

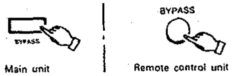
5. Adjust the level of the rear channel.
Adjust the level according to the source, using the Dolby Pro Logic settings as reference.

6. Adjust the effect level.
Adjust the level in the same way as for the Wide Screen mode above.

7. Follow steps 6 to 8 under "Playing the program source". on Page 14.

To turn off the surround mode

12. Press the BYPASS button.



Main unit | Remote control unit

Normal stereo playback resumes.

■ Using the Personal Memory

Surround mode settings and the input function can be stored at personal memory buttons "1" and "2", then recalled directly from any surround mode simply by pressing button "1" or "2".

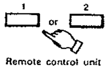
1 Storing the setting in the personal memory

1. Set the desired surround mode and input function.
2. Press the personal memory button.

Remote control unit

(The memory setting mode is set and the indicator on the MFD flashes.)

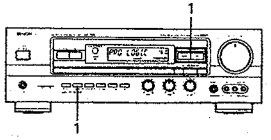
3. Press the desired personal memory button ("1" or "2").

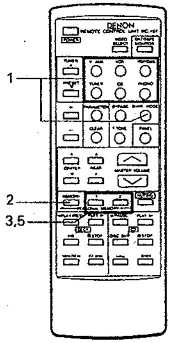


Remote control unit

4. "M 1 (2) SET" appears on the MFD indicating that the setting has been stored.

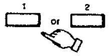
NOTE:
- The memory setting mode is set for 6 seconds. If any button other than personal memory button "1" or "2" is pressed, the memory setting mode is cancelled.





2 Recalling the personal memory

5. Press the personal memory button ("1" or "2") at which the desired setting was stored.



Remote control unit

6. The surround mode and input function switch automatically.

NOTES:
- Personal memory buttons "1" and "2" will not function during the tape monitor mode.
- The surround mode recalled with the PERSONAL MEMORY "1" or "2" button is the same as the mode selected with the surround mode button. Thus, if the parameters of the surround mode which was stored in the memory are cleared, when the mode is recalled it is set to the initial values.
- Upon shipment from the factory, the "WIDE SCREEN" mode is stored at personal memory "1", the "LIVE" mode at personal memory "2". The input function is set to VDP/DBS for both "1" and "2".
- Do not to press personal memory buttons "1" or "2" buttons during recording on the cassette deck.

■ Operations Possible in the Various Surround Modes

The following is a list of the buttons and functions which can be operated during the different surround modes. Figures in parentheses indicate adjustment ranges.

		OUTPUT	CENTER LEVEL	REAR LEVEL	CENTER MODE	3CH LOGIC	TEST TONE	DELAY TIME
BYPASS		○	×	×	△[1]	×	×	×
DOLBY PRO LOGIC	NORMAL	○	○ (0~–24dB)	○ (0~–24dB)	○	○	○	○ (15~30ms)
	PHANTOM	○	×	○ (0~–24dB)	○	×	○	○ (15~30ms)
	WIDE	○	○ (0~–24dB)	○ (0~–24dB)	○	○	○	○ (15~30ms)
DOLBY 3CH LOGIC	NORMAL	○	○ (0~–24dB)	×	○	○	○	×
	WIDE	○	○ (0~–24dB)	×	○	○	○	×
WIDE SCREEN & LIVE	NORMAL	○	○ (0~–24dB)	○ (0~–24dB)	○	×	×	○ (6~30ms)
	PHANTOM	○	×	○ (0~–24dB)	○	×	×	○ (6~30ms)
	WIDE	○	○ (0~–24dB)	○ (0~–24dB)	○	×	×	○ (6~30ms)
MONO MOVIE		○	×	○ (0~–24dB)	△[1]	×	×	×
CLASSIC CONCERT		○	×	○ (0~–24dB)	△[1]	×	×	×
ROCK CONCERT		○	×	○ (0~–24dB)	△[1]	×	×	×
STADIUM		○	×	○ (0~–24dB)	△[1]	×	×	×

		EFFECT LEVEL	CLEAR	PERSONAL[2]		DAT/TAPE MONITOR
				"MEMORY"	"1" & "2"	
BYPASS		×	○	×	○	○
DOLBY PRO LOGIC	NORMAL	×	○	○	○	○
	PHANTOM	×	○	○	○	○
	WIDE	×	○	○	○	○
DOLBY 3CH LOGIC	NORMAL	×	○	○	○	○
	WIDE	×	○	○	○	○
WIDE SCREEN & LIVE	NORMAL	○ (5~15)	○	○	○	○
	PHANTOM	○ (5~15)	○	○	○	○
	WIDE	○ (5~15)	○	○	○	○
MONO MOVIE		○ (5~15)	○	○	○	○
CLASSIC CONCERT		○ (5~15)	○	○	○	○
ROCK CONCERT		○ (5~15)	○	○	○	○
STADIUM		○ (5~15)	○	○	○	○

○: Operation possible
×: Operation not possible

[1] Switches to the Dolby Pro (3CH) Logic mode for any modes other than Dolby Pro (3CH) Logic, Wide Screen and LIVE.
[2] Personal memory buttons MEMORY "1" and "2" will not function during the DAT/tape monitor mode.

- **The sound may be distorted for some sources if the rear level or effect level is raised during surround playback. If this happens, lower the rear level and effect level.**

12 LAST FUNCTION MEMORY

- This amplifier is equipped with a last function memory which stores the input and output setting conditions as they were immediately before the power is switched off.
  This function eliminates the need to perform complicated resettings when the power is switched on.
- This amplifier is also equipped with a back-up memory. This function provides approximately one week of memory storage with the power cord disconnected.

13 TROUBLESHOOTING

If a problem should arise, first check the following:

1. Are the connections correct?
2. Have you operated the amplifier according to the Operating Instructions?
3. Are the speakers, turntable, and other components operating properly?

If the amplifier is not operating properly, check the items listed in the table below. Should the problem persist, there may be a malfunction. Disconnect the power immediately and contact your store of purchase.

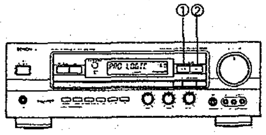
	Symptom	Cause	Measures	Page
Common problems arising when listening to the CD, records, tapes, etc.	MFD not lit and sound not produced when power switch set to on.	• Power cord not plugged in securely.	• Check the insertion of the power cord plug.	8
	MFD lit but sound not produced.	• Speaker cords not securely connected. • OUTPUT button is off. • Improper position of the audio function button. • Volume control set to minimum. • MUTING is on.	• Connect securely. • Press the OUTPUT button. • Set to a suitable position. • Turn volume up to suitable level. • Switch off MUTING.	10, 11 17 14 14 15
	–PROTECT– display appears multi-function display.	• Speaker terminals are short-circuited. • Block the ventilation holes of the set. • The unit is operating at continuous high power conditions and/or inadequate ventilation.	• Switch power off, connect speakers properly, then switch power back on. • Turn off the set's power, then ventilate it well to cool it down. Once the set is cooled down, turn the power back on. • Turn off the set's power, then ventilate it well to cool it down. Once the set is cooled down, turn the power back on.	10, 11 3, 4 3, 4
	Sound produced only from one channel.	• Incomplete connection of speaker cords. • Incomplete connection of input/output cords. • Left/right balance is off.	• Connect securely. • Connect securely. • Adjust balance knob properly.	10, 11 12, 13 14
	Positions of instruments reversed during stereo playback.	• Reverse connections of left and right speakers or left and right input/output cords.	• Check left and right connections.	12, 13
	Sound seems distorted.	• Effect level parameter is high. • Rear level is too high.	• Set the effect level parameter to lower level. • Set the rear level to lower level.	22, 23 22, 23
	Sound seems strange.	• DSP parameter settings are poor.	• Press the CLEAR button then adjust the DSP parameters.	22,23,27
	Personal memory function does not work.	• DAT/tape monitor mode set.	• Press the DAT/TAPE button to set the source.	16
When playing records	Humming noise produced when record is playing.	• Ground wire of turntable not connected properly. • Incomplete PHONO jack connection. • TV or radio transmission antenna nearby.	• Connect securely. • Connect securely. • Contact your store of purchase.	12 12 –
	Howling noise produced when volume is high.	• Turntable and speaker systems too close together. • Floor is unstable and vibrates easily.	• Separate as much as possible. • Use cushions to absorb speaker vibrations transmitted by floor. If turntable is not equipped with insulators, use audio insulators (commonly available).	– –
	Sound is distorted.	• Stylus pressure too weak. • Dust or dirt on stylus. • Cartridge defective.	• Apply proper stylus pressure. • Check stylus. • Replace cartridge.	– – –
	Volume is weak.	• MC cartridge being used.	• Replace with MM cartridge or use a head amplifier or step-up transformer.	12
Remote control unit	Amplifier does not operate properly when remote control unit is used.	• Batteries dead. • Remote control unit too far from amplifier. • Obstacle between amplifier and remote control unit. • Different button is being pressed. • ⊕ and ⊖ ends of battery inserted in reverse.	• Replace with new batteries. • Move closer. • Remove obstacle. • Press the proper button. • Insert batteries properly.	6 6 6 6 6

14 INITIALIZATION OF THE MICROPROCESSOR

When the indication of the MFD display is not normal or when the operation of the unit does not shows the reasonable result, the initialization of the microprocessor is required by the following procedure.

1. Switch off the unit and remove the AC power cord from the wall outlet.
2. Hold the following 2 buttons of the main unit at the same time (as illustrated in the diagram below, ① AUDIO FUNCTION button, ② VIDEO FUNCTION button, and plug the power cord into the outlet.
3. Check that the entire MFD display is flashing with an interval of about 1 second, and release your fingers from the 2 buttons.
4. Switch on the unit and the microprocessor will be initialized. The input function is set to tuner with the bypass mode automatically.

NOTE:
- When the unit does not show the result of above 3 and 4, repeat the procedure from 1 again.
- When the microprocessor is initialized, all settings you have made are reset to the factory presettings.



Initial parameter values for the different modes

	OUTPUT	FRONT SP	CENTER SP/PRE	REAR SP	CENTER LEVEL	REAR LEVEL	CENTER MODE	3CH LOGIC	TEST TONE	DELAY TIME	EFFECT LEVEL
BYPASS	ON	ON	OFF	OFF	—	—	—	—	—	—	—
DOLBY PRO LOGIC	ON	ON	ON	ON	–12dB	–12dB	NORMAL	OFF	OFF	21msec	—
WIDE SCREEN	ON	ON	ON	ON	–12dB	–12dB	NORMAL	—	—	21msec	10
LIVE	ON	ON	ON	ON	–12dB	–12dB	NORMAL	—	—	21msec	10
MONO MOVIE	ON	ON	OFF	ON	—	–12dB	—	—	—	—	10
CLASSIC	ON	ON	OFF	ON	—	–12dB	—	—	—	—	10
ROCK	ON	ON	OFF	ON	—	–12dB	—	—	—	—	10
STADIUM	ON	ON	OFF	ON	—	–12dB	—	—	—	—	10

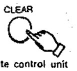
SP: SPEAKER OUT
PRE: PRE OUT

- INPUT FUNCTION : TUNER
- PERSONAL MEMORY 1
  INPUT : VDP/DBS
  SURROUND MODE : WIDE SCREEN
- PERSONAL MEMORY 2
  INPUT : VDP/DBS
  SURROUND MODE : LIVE

■ Initialization of the Individual Modes

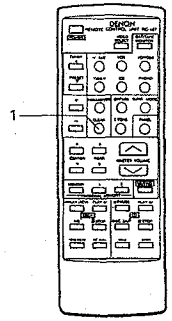
Use this to set the adjusted values back to the factory preset values.

1. Press the CLEAR button.



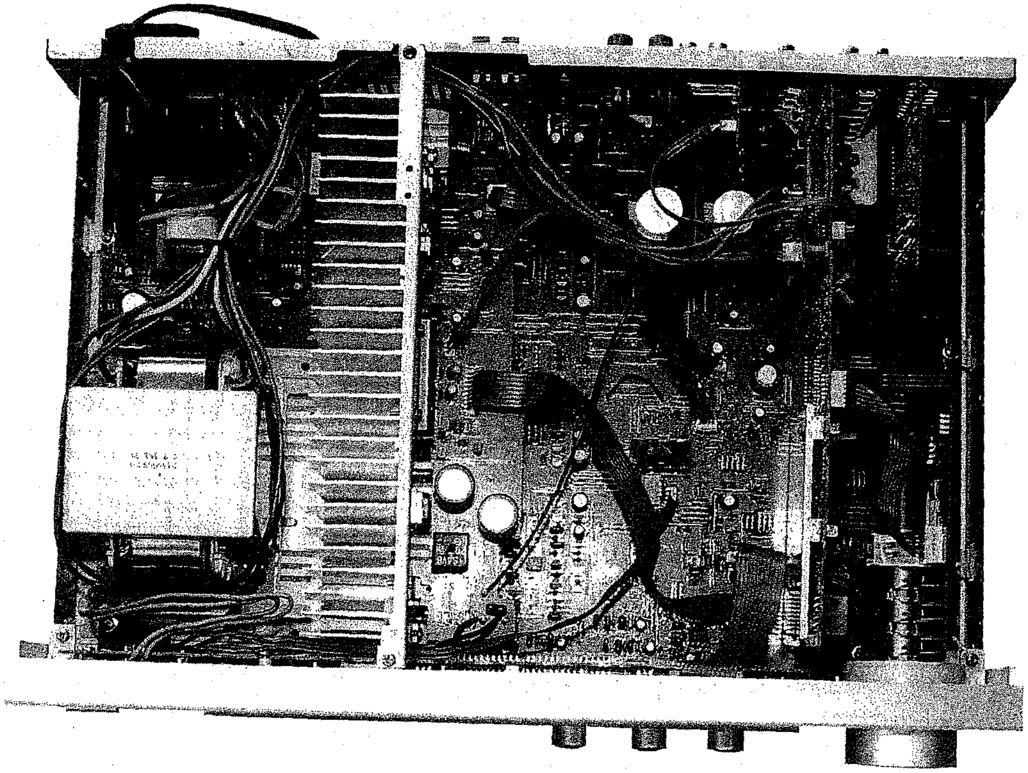
Remote control unit

The values for the currently selected mode only are reset to the values shown on the above table.



WIRE ARRANGEMENT

In case of wires require unclasping or loosening to move the location to perform adjustment or part replacement, be sure to rearrange them neatly to restore properly in the same location as they were originally placed, or causing to produce a noise may occasionally occur.



DISASSEMBLY

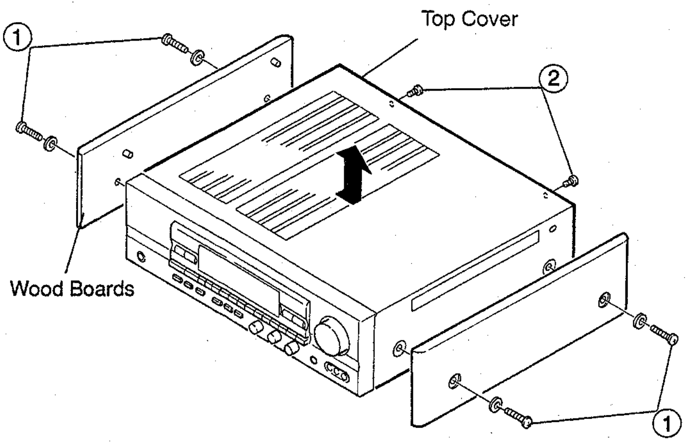
(To reassemble reverse disassembly)

1. Wood Boards (AVC-1530G only)

Remove 4 screws ①.

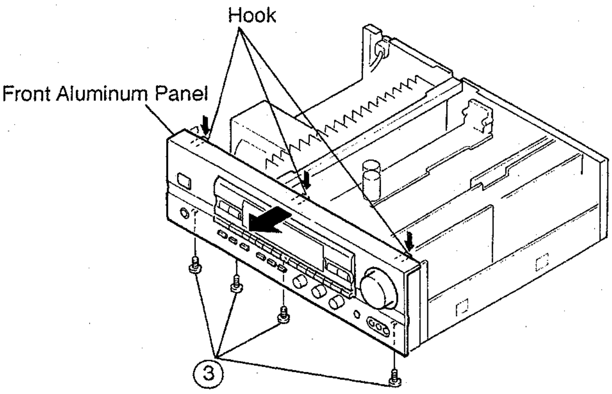
2. Top Cover

Remove 2 screws ②.


①
Top Cover
②
Wood Boards
①

3. Front Aluminium Panel

Remove 4 screws ③ and undo hooks at 3 places.

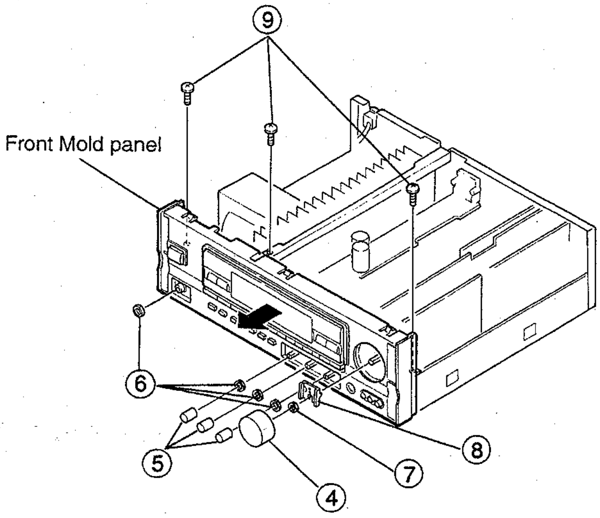

Hook
Front Aluminum Panel
③

4. Front Mold Panel

(1) Pull out Master Volume knob ④ and 3 round knobs ⑤.

(2) Remove 4 nut ⑥ and nut ⑦ and remove bracket ⑧.

(3) Remove 3 screws ⑨.

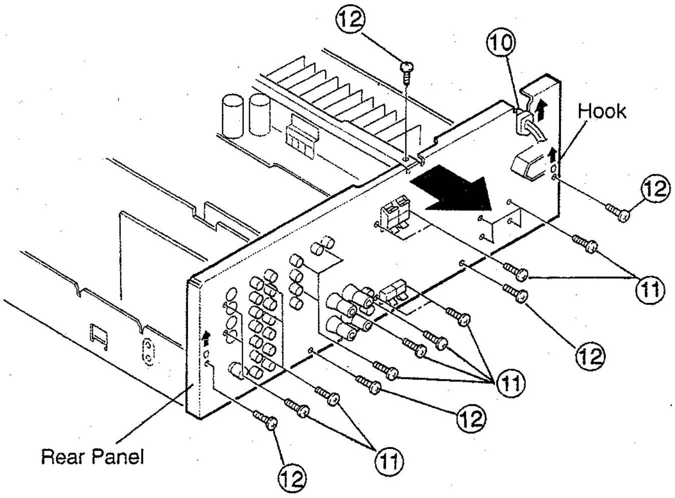

⑨
Front Mold panel
⑥
⑤
④
⑦
⑧

5. Rear Panel

(1) Disconnect cord bush ⑩

(2) Remove 18 screws ⑪ and 5 screws ⑫

(3) Remove hooks at 2 places in arrow direction.


⑫
⑩
Hook
⑫
⑪
⑫
⑪
⑫
Rear Panel
⑫
⑪

ADJUSTMENT

- **Initiating (Memory clearing) Method**

To clear memory contents of microcomputer and restore to the initial state, take the following steps;

1. Press power switch, turn off power of the unit, and set to standby mode.
2. Pull out power cord from wall outlet temporarity.
3. Insert power cord into outlet while simultaneously pressing two keys of AUDIO and VIDEO.
4. Press power switch to confirm that memory contents are cleared.

By completion of the above, the initial state is restored. In case the memory can not be cleared due to some reasons, repeat steps 1 through 3.

● AUDIO SECTION

Idling Current (1U-2615-1)

Required measurement equipment: DC Voltmeter

Arrangement

(1) Avoid direct blow from an air conditioner or an electric fan, and adjust the unit at normal room temperature 15°C ~ 30°C. (59°F ~ 86°F).

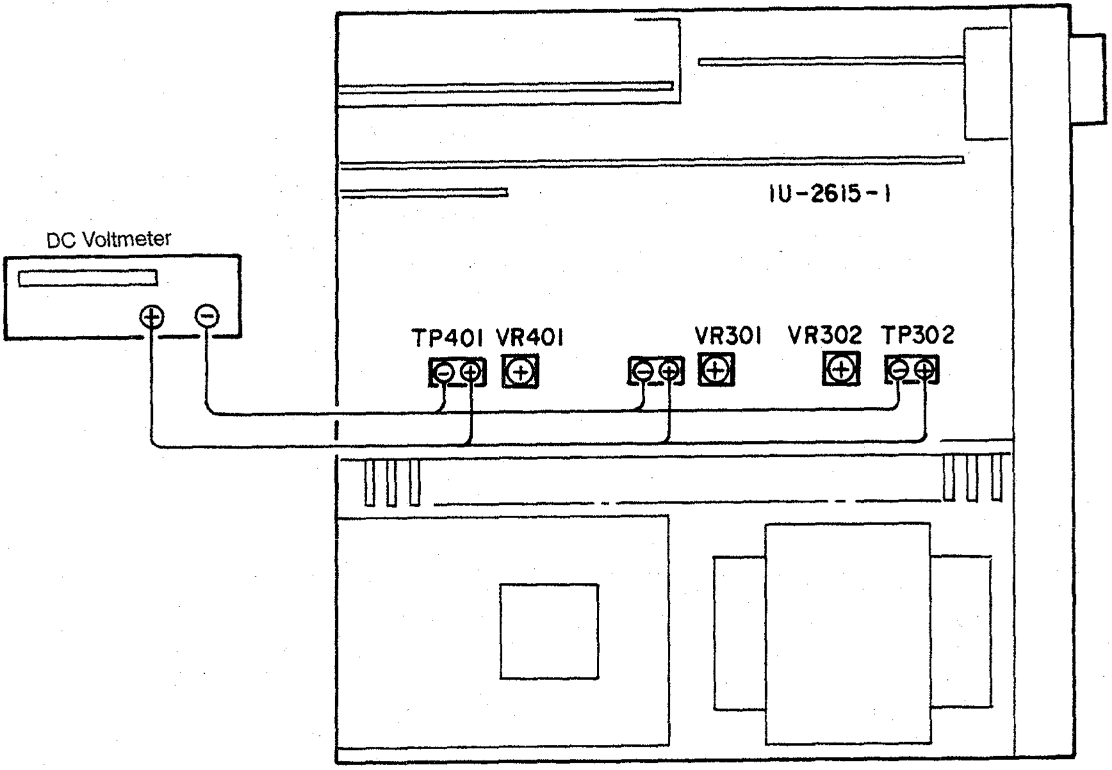
(2) Presetting

● POWER (Power source switch)	→ OFF
● MODE (Mode buttton)	→ BY PASS
● FUNCTION (Function button)	→ CD
● VOLUME (Volume control)	→ 0: fully counterclockwise (↺ min.)
● CENTER VOLUME (Center volume control)	→ −12dB
● BASS, TREBLE (Tone control)	→ 0: (Controls to center)
● SPEAKERS (Speaker terminal)	→ No load (Do not connect speaker, dummy resistor, etc.)

Adjustment

(1) Remove top cover and set VR401, VR301 and VR302 of 1U-2615-1 (Main Unit) at counterclockwise fully.
(2) Connect DC Voltmeter to test points (Lch T.P.302, Rch T.P.301, CENTER ch T.P.401).
(3) Connect power cord to AC Line, and turn power switch "ON".
(4) Allow 15 minutes, and turn VR301, VR302 and VR401 clockwise (↻) and adjust the TEST POINTS voltage to 1.5 mV ± 0.5 mV DC.
(5) After 2 minutes from preset, turn VR301, VR302 and VR401 to set the voltage to 3 mV ± 0.5mV DC.

1U-2615-1 Main Unit (Component Side)

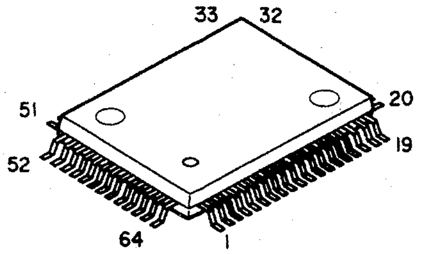


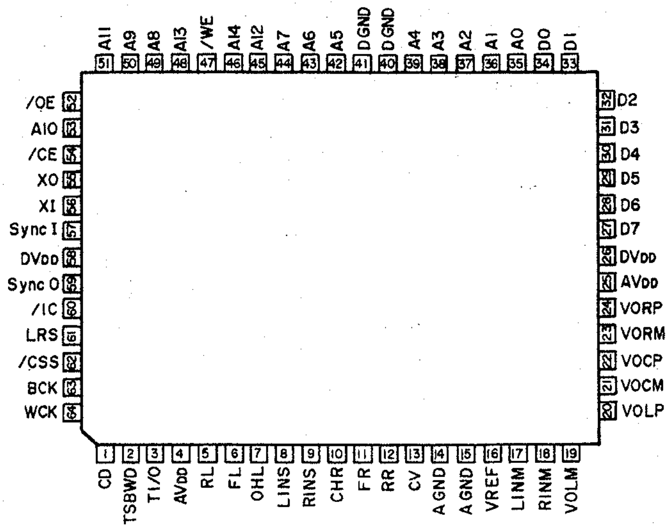
SEMICONDUCTORS

IC's

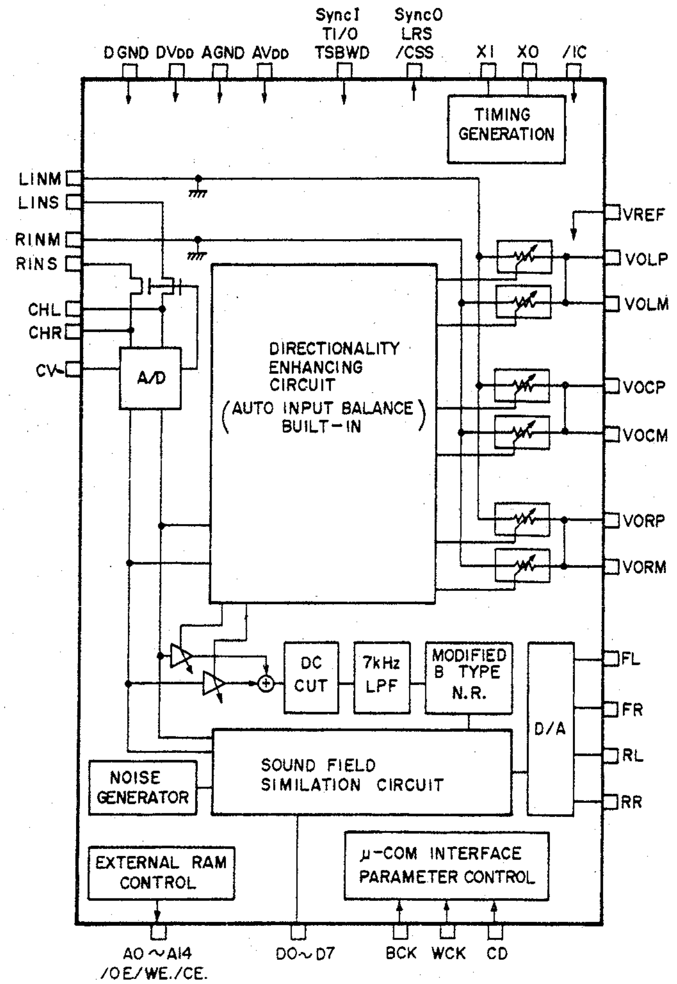
Note)
Indications before IC numbers denote P.W.B. Name.
MA : Main Amp P.W.B. Unit
RE : Rear Amp P.W.B. Unit
SU : Surround P.W.B. Unit

F71002B
(SU: IC106)

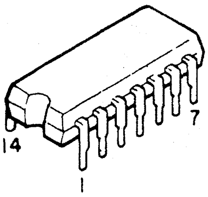

33
32
51
20
52
19
64
1

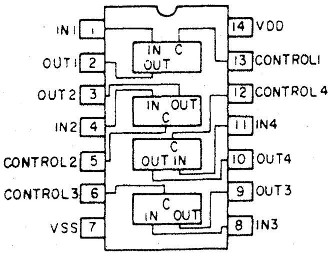

51 A11
50 A9
49 A8
48 A13
47 /WE
46 A14
45 A12
44 A7
43 A6
42 A5
41 DGND
40 DGND
39 A4
38 A3
37 A2
36 A1
35 A0
34 D0
33 D1
52 /OE
53 A10
54 /CE
55 XO
56 XI
57 Sync I
58 DVDD
59 Sync O
60 /IC
61 LRS
62 /CSS
63 BCK
64 WCK
32 D2
31 D3
30 D4
29 D5
28 D6
27 D7
26 DVDD
25 AVDD
24 VORP
23 VORM
22 VOCP
21 VOCM
20 VOLP
1 CD
2 TSBWD
3 TI/O
4 AVDD
5 RL
6 FL
7 OHL
8 LINS
9 RINS
10 CHR
11 FR
12 RR
13 CV
14 AGND
15 AGND
16 VREF
17 LINM
18 RINM
19 VOLM

BLOCK DIAGRAM


DGND
DVDD
AGND
AVDD
SyncI
TI/O
TSBWD
SyncO
LRS
/CSS
XI
XO
/IC
TIMING GENERATION
LINM
LINS
RINM
RINS
CHL
CHR
CV
A/D
DIRECTIONALITY ENHANCING CIRCUIT (AUTO INPUT BALANCE BUILT-IN)
VREF
VOLP
VOLM
VOCP
VOCM
VORP
VORM
DC CUT
7kHz LPF
MODIFIED B TYPE N.R.
D/A
FL
FR
RL
RR
NOISE GENERATOR
SOUND FIELD SIMILATION CIRCUIT
EXTERNAL RAM CONTROL
μ-COM INTERFACE PARAMETER CONTROL
A0～A14 /OE/WE./CE.
D0～D7
BCK
WCK
CD

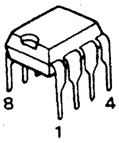
LC4966
(SU: IC103)

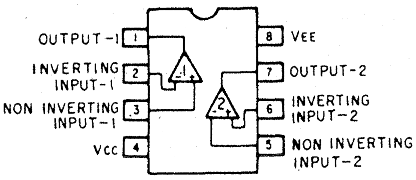


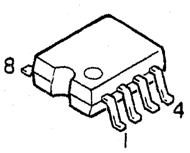

IN1 1
OUT1 2
OUT2 3
IN2 4
CONTROL2 5
CONTROL3 6
VSS 7
14 VDD
13 CONTROL1
12 CONTROL4
11 IN4
10 OUT4
9 OUT3
8 IN3
IN C OUT
IN OUT C
C OUT IN
C IN OUT

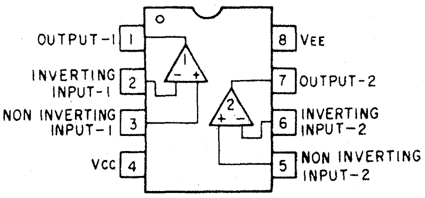
BA4558
(MA: IC451)

BA4558F (SU: IC101, 104, 105, 115 ~ 117, 253, 255, 257)
NJM2082M (SU: IC109, 110, 113, 114)
NJM5532MD (SU: IC111, 112)

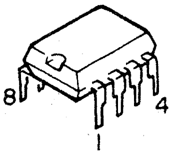


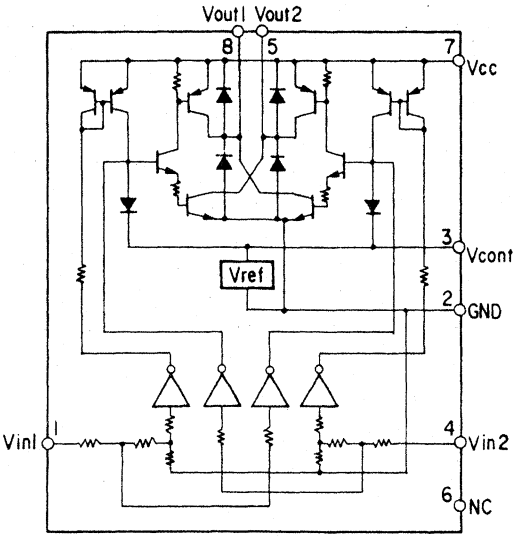

OUTPUT-1 1
INVERTING INPUT-1 2
NON INVERTING INPUT-1 3
Vcc 4
8 VEE
7 OUTPUT-2
6 INVERTING INPUT-2
5 NON INVERTING INPUT-2
1
2




OUTPUT-1 1
INVERTING INPUT-1 2
NON INVERTING INPUT-1 3
VCC 4
8 VEE
7 OUTPUT-2
6 INVERTING INPUT-2
5 NON INVERTING INPUT-2
1
2

LB1639 (SU: IC255)

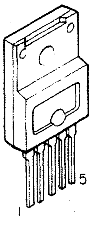



Vout1 Vout2
8
5
7
Vcc
3
Vcont
Vref
2
GND
1
Vin1
4
Vin2
6
NC

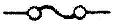
- **IC PROTECTORS**

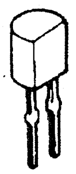
SI-18752 (RE: IC501, 502)

ICP-N15 (RE: IC552, 603)
ICP-N20 (RE: IC505, 506)

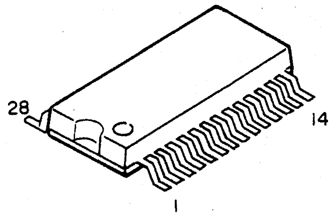


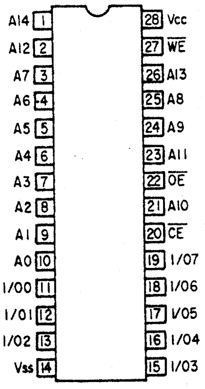
1. +IN
2. –IN
3. $-V_{EE}$
4. Output
5. +Vcc

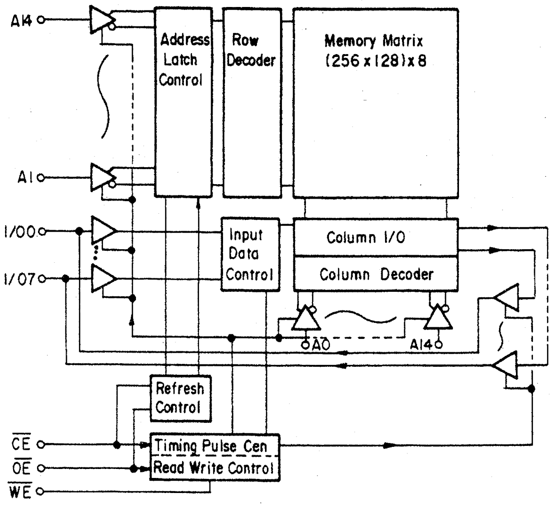




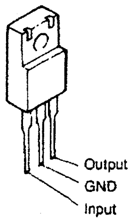
HM65256BLFP-10T
(SU: IC107)



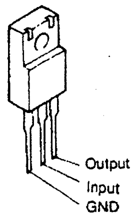

A14 1
A12 2
A7 3
A6 4
A5 5
A4 6
A3 7
A2 8
A1 9
A0 10
I/O0 11
I/O1 12
I/O2 13
Vss 14
28 Vcc
27 WE
26 A13
25 A8
24 A9
23 A11
22 OE
21 A10
20 CE
19 I/O7
18 I/O6
17 I/O5
16 I/O4
15 I/O3


A14
A1
I/O0
I/O7
Address Latch Control
Row Decoder
Memory Matrix (256 x 128) x 8
Input Data Control
Column I/O
Column Decoder
A0
A14
Refresh Control
Timing Pulse Gen
Read Write Control
CE
OE
WE

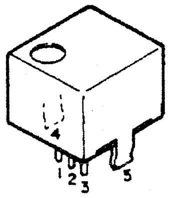
NJM7805FA(S) (RE: IC507, 602)
NJM7815FA(S) (RE: IC503)
NJM7806FA(S) (RE: IC551)


Output
GND
Input

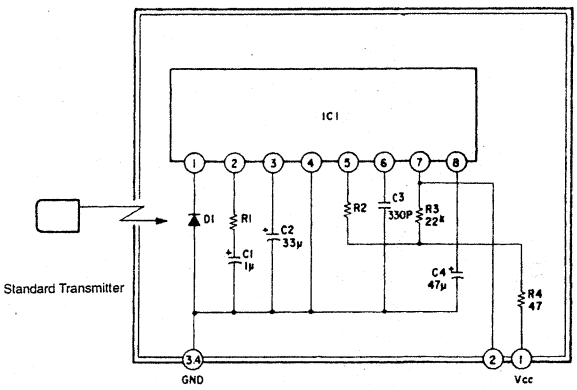
NJM7915FA (RE: IC504)


Output
Input
GND

• OTHERS
SBX1610-52 (Remote Control Receiver)
(RE: IC701)

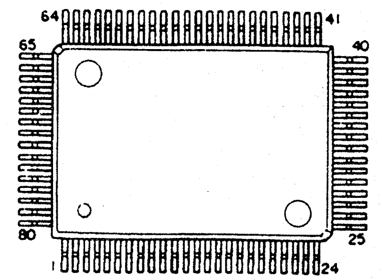


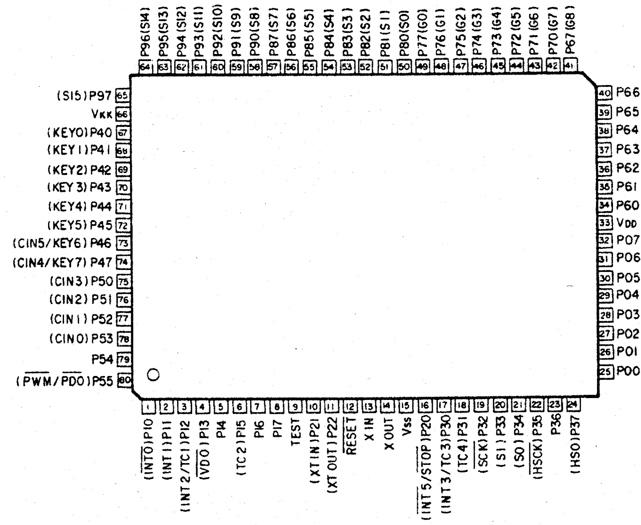
1. Vcc
2. Output
3. GND
4. Case fin
5. Case fin


IC1
1
2
3
4
5
6
7
8
D1
R1
C1 1μ
C2 33μ
R2
C3 330P
R3 22k
C4 47μ
R4 47
3,4
GND
2
1
Vcc
Standard Transmitter

IC1	: CX20106A chip
D1	: Pin photodiode chip
C1, C2, C4	: Aluminum electrolytic capacitor
C3	: SL characteristic ± 5%
R1	: Gain control resistor
R2	: fo control resistor (using ± 1%)
R (Other than above items)	: ± 5%

TMP87CK70AF
(MA:IC801)


64
41
65
40
80
25
1
24


P96(S14) 64
P95(S13) 63
P94(S12) 62
P93(S11) 61
P92(S10) 60
P91(S9) 59
P90(S8) 58
P87(S7) 57
P86(S6) 56
P85(S5) 55
P84(S4) 54
P83(S3) 53
P82(S2) 52
P81(S1) 51
P80(S0) 50
P77(G0) 49
P76(G1) 48
P75(G2) 47
P74(G3) 46
P73(G4) 45
P72(G5) 44
P71(G6) 43
P70(G7) 42
P67(G8) 41
(S15)P97 65
Vkk 66
(KEY0)P40 67
(KEY1)P41 68
(KEY2)P42 69
(KEY3)P43 70
(KEY4)P44 71
(KEY5)P45 72
(CIN5/KEY6)P46 73
(CIN4/KEY7)P47 74
(CIN3)P50 75
(CIN2)P51 76
(CIN1)P52 77
(CIN0)P53 78
P54 79
(PWM/PDO)P55 80
40 P66(G9)
39 P65(G10)
38 P64(G11)
37 P63(G12)
36 P62(G13)
35 P61(G14)
34 P60(G15)
33 VDD
32 P07
31 P06
30 P05
29 P04
28 P03
27 P02
26 P01
25 P00
1 (INT0)P10
2 (INT1)P11
3 (INT2/TC1)P12
4 (VDO)P13
5 P14
6 (TC2)P15
7 P16
8 P17
9 TEST
10 (XTIN)P21
11 (XT OUT)P22
12 RESET
13 XIN
14 XOUT
15 Vss
16 (INT5/STOP)P20
17 (INT3/TC3)P30
18 (TC4)P31
19 (SCK)P32
20 (SI)P33
21 (SO)P34
22 (HSCK)P35
23 P36
24 (HSO)P37

TMP87CK70AF Port Allocation Table

Table 1 (1/4)

Pin	Terminal Name	I/O	Logic	Initial Setting	Usage
1	P10(INT0)	I	L*	—	Power breakdown; Breakdown detect input (*L at Breakdown)
2	P11(INT1)	I	L*	—	PROTECTION: PROTECTION INPUT (*H at detect mode)
3	P12(INT2/TC1)	O	Serial	L	ST TUNER PLL Control (LM7001)
4	P13(DV0)	O	H*	L	TUNER MUTE ("H" at MUTE mode)
5	P14	I	L*	—	TUNED SIGNAL input ("L" at reception mode)
6	P15(TC2)	I	L*	—	STEREO SIGNAL input ("L" at stereo reception mode)
7	P16	O	L*	L	(ST / MONO ; STEREO / MONO SHIFT (*L at stereo mode)
8	P17	O	—	L	Not used
9	TEST	I	—	—	Connect to GND
10	P21(XTIN)	O	—	L	Not used
11	P22(XTOUT)	O	—	L	Not used
12	RESET	I	L	—	RESET; Microcomputer reset Input
13	XIN	I	—	—	Oscillator connection (8MHz)
14	XOUT	I	—	—	
15	Vss	PW	—	—	0V (GND)
16	P20 (INT5/STOP)	O	—	L	Not used
17	P30 (INT3/TC3)	I	L	—	REMOTE: REMOTE controller optical signal input (*H at reset mode)
18	P31(TC4)	O	H	L	FL-RS
19	P32(SCK)	O	H	H	PL-DATA } FL Driver control (MSC 1937)
20	P33(SI)	O	H	H	FL-CLK

* In AVR mode, ports within frame takes setting contents of Table 1-1. In each mode, unused ports are set to output ports depending on contents of initial setting. (P. ON state)

Table 1 (2/4)

Pin	Terminal Name	I/O	Logic	Initial Setting	Usage
21	P34(SO)	O	L	L/H	IC : DSP Initial clear (*L at reset mode)
22	P35(HSCK)	O	H	L/H	BCK
23	P36	O	H	L	WCK } DSP Control (F71002B)
24	P37(HSO)	O	H	L/H	CD
25	P00	O	H	L	CK
26	P01	O	H	L	CE } Audio Input/Output, Surround
27	P02	O	H	L	DATA (LC7821,7822)
28	P03	O	H	L	CK
29	P04	O	H	H	DATA } Electronic Volume control (TC9176P)
30	P05	O	H	L	ST1 CENTER CH
31	P06	O	—	L	Not used
32	P07	O	L*	L/H	DSP POWER : DSP POWER ON/OFF (*H at ON)
33	VDD	PW	—	—	+5V
34	P60(G15)	O	H	L	VOL.UP } Motor drive control
35	P61(G14)	O	H	L	VOL.DOWN (LB1639)
36	P62(G13)	O	H*	H	LED : STANDBY LED (*H at lit time)
37	P63(G12)	O	L*	H	VCR-1 1NH (*H at inhibit mode)
38	P64(G11)	O	—	L	Not used
39	P65(G10)	O	—	L	Not used
40	P66(G9)	O	—	L	Not used

* In AVR mode, ports within frame are set to output ports and set to "L". In each mode, unused ports are set to output ports depending on contents of initial setting. (P. ON state)

Table 1 (3/4)

Pin	Terminal Name	I/O	Logic	Initial Setting	Usage
41	P67(G8)	O	—	L	Not used
42	P70(G7)	O	—	L	Not used
43	P71(G6)	O	—	L	Not used
44	P72(G5)	O	H	L	FRONT : Speaker relay control
45	P73(G4)	O	—	L	Not used
46	P74(G3)	O	H	L	SP-REAR : Speaker relay control
47	P75(G2)	O	H	L	SP-CENTER : Seaker relay control
48	P76(G1)	O	H	L	H/P, PRE MUTE : Premute control
49	P77(G0)	O	L*	H	H/P, PRE MUTE : ("L" at Mute mode)
50	P80(S0)	O	H	L	POWER : Power relay control
51	P81(S1)	O	—	L	Not used
52	P82(S2)	O	—	L	Not used
53	P83(S3)	O	—	L	Not used
54	P84(S4)	O	—	L	Not used
55	P85(S5)	O	—	L	Not used
56	P86(S6)	O	—	L	Not used
57	P87(S7)	O	—	L	Not used
58	P90(S8)	O	—	L	Not used
59	P91(S9)	O	—	L	Not used
60	P92(S10)	O	—	L	Not used

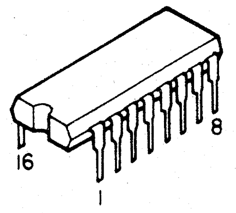
* In each mode, unused ports are set to output ports depending on contents of initial setting. (P.ON State)

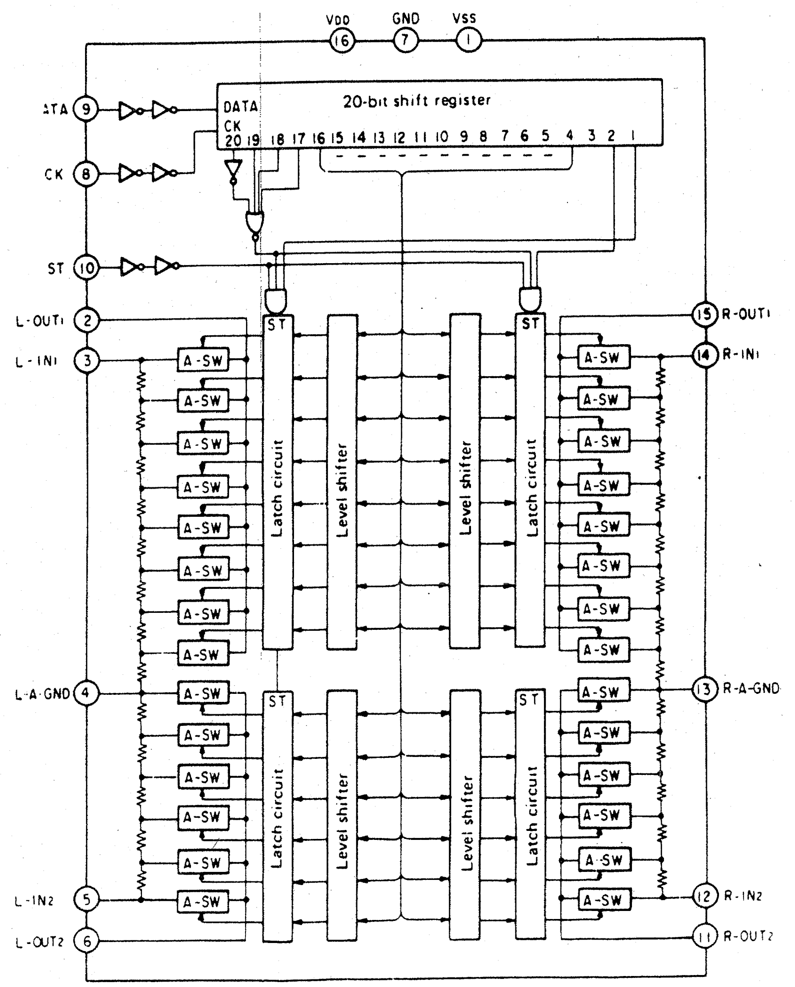
Table 1 (4/4)

Pin	Terminal Name	I/O	Logic	Initial Setting	Usage
61	P93(S11)	O	—	L	Not used
62	P94(S12)	O	—	L	Not used
63	P95(S13)	O	—	L	Not used
64	P96(S14)	O	—	L	Not used
65	P97(S15)	O	—	L	Not Used
66	VKK	PW	—	—	VKK −15V
67	P40(KEY0)	O	L	H	A } VIDEO INPUT CONTROL
68	P41(KEY1)	O	L	H	B (BA7625, 7626)
69	P42(KEY2)	O	L	H	C } VIDEO REC OUT CONTROL
70	P43(KEY3)	O	L	H	D (BA7625, 7626)
71	P44(KEY4)	O	L	H	E VIDEO INPUT/REC CONTROL
72	P45(KEY5)	O	—	L	Not Used
73	P46(CIN5/KEY6)	O	—	L	Not Used
74	P47(CIN4/KEY7)	I	—	—	MODE : AVC/AVR shift (A/D conversion input)
75	P50(CIN3)	I	—	—	Key 4
76	P51(CIN2)	I	—	—	Key 3 } UNIT KEY input
77	P52(CIN1)	I	—	—	Key 2 (A/D conversion input)
78	P53(CIN0)	I	—	L	Key 1
79	P54	O	Serial	L	CK : TUNER PLL CONTROL (LM7001)
80	P55(PWM/PD0)	O	Serial	—	DATA: TUNER PLL Control (LM7001)

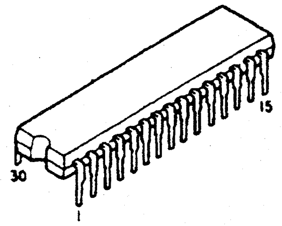
* In AVR mode, ports within frame takes setting contents of Table 1-1. In each mode, unused ports are set to outputs ports depending on contents of initial setting. (P. ON state)

TC9176P (SU: IC251)

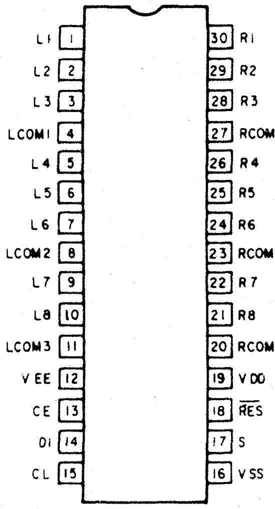



VDD
GND
VSS
16
7
1
DATA 9
CK 8
ST 10
DATA
CK
20-bit shift register
20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
L-OUT1 2
L-IN1 3
L-A-GND 4
L-IN2 5
L-OUT2 6
15 R-OUT1
14 R-IN1
13 R-A-GND
12 R-IN2
11 R-OUT2
ST
A-SW
Latch circuit
Level shifter

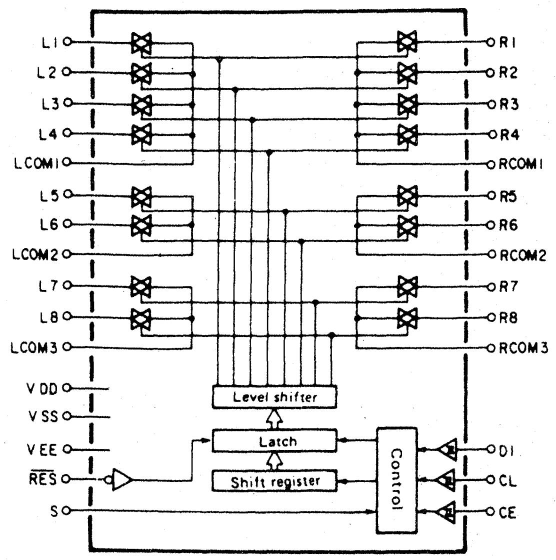
LC7821 (SU: IC102)
LC7823 (SU: IC108)



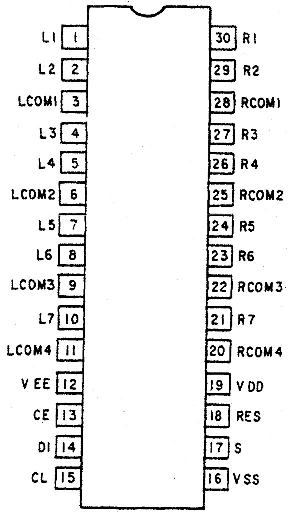
LC7821


L1 1
L2 2
L3 3
LCOM1 4
L4 5
L5 6
L6 7
LCOM2 8
L7 9
L8 10
LCOM3 11
VEE 12
CE 13
DI 14
CL 15
30 R1
29 R2
28 R3
27 RCOM1
26 R4
25 R5
24 R6
23 RCOM2
22 R7
21 R8
20 RCOM3
19 VDD
18 RES
17 S
16 VSS

LC7821


L1
L2
L3
L4
LCOM1
L5
L6
LCOM2
L7
L8
LCOM3
VDD
VSS
VEE
RES
S
R1
R2
R3
R4
RCOM1
R5
R6
RCOM2
R7
R8
RCOM3
Level shifter
Latch
Shift register
Control
DI
CL
CE

LC7823


L1 1
L2 2
LCOM1 3
L3 4
L4 5
LCOM2 6
L5 7
L6 8
LCOM3 9
L7 10
LCOM4 11
VEE 12
CE 13
DI 14
CL 15
30 R1
29 R2
28 RCOM1
27 R3
26 R4
25 RCOM2
24 R5
23 R6
22 RCOM3
21 R7
20 RCOM4
19 VDD
18 RES
17 S
16 VSS

LC7823

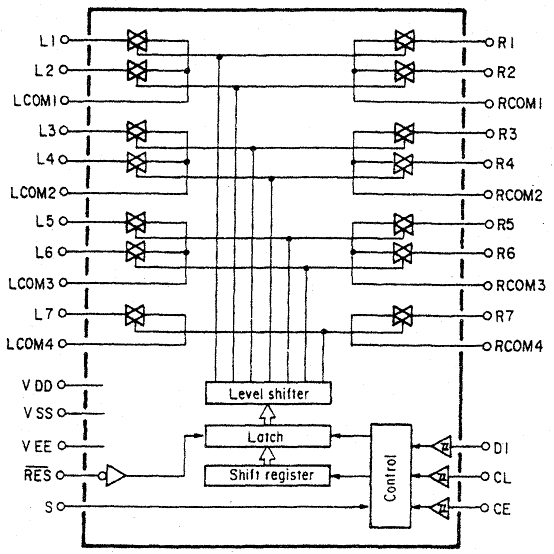
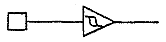
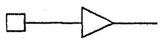
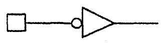
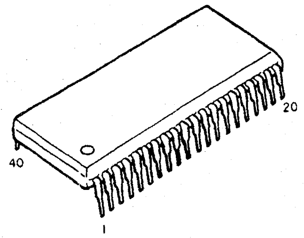

L1
L2
LCOM1
L3
L4
LCOM2
L5
L6
LCOM3
L7
LCOM4
VDD
VSS
VEE
RES
S
R1
R2
RCOM1
R3
R4
RCOM2
R5
R6
RCOM3
R7
RCOM4
Level shifter
Latch
Shift register
Control
DI
CL
CE

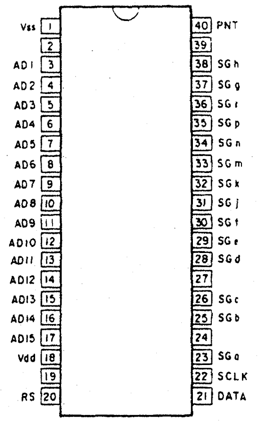
Table of LC7821, LC7823 Terminal Function

Name of Terminal	I/O	Equivalent Internal Circuit	Function of Terminal
VDD, Vss, VEE			Power terminal.
L1 ~ L8, R1 ~ R8 LCOM1 ~ LCOM4, BCOM1 ~ BCOM4		Refer to block diagram	In/Out terminal of analog switch.
CL, DI, CE	I		Serial data input terminal (Schmidt buffer). CL = Clock input terminal. DI = Data input terminal. CE = Chip enable terminal.
S	I		Selection terminal for using of two. Address will be shifted as per below table when switching S terminal to L or H.
RES	I		Reset terminal. Condition of analog switch is not fixed at the time of turning on the power. When shift this termnal to L, all analog switches become OFF.

Name of Item	S Terminal	Address			
		A0	A1	A2	A3
LC7821	L	0	1	0	1
	H	1	1	0	1
LC7823	L	0	1	1	1
	H	1	1	1	1

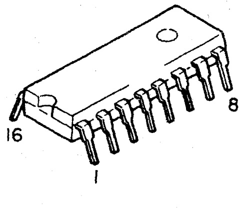
MSC1937-01 (RE:IC702)

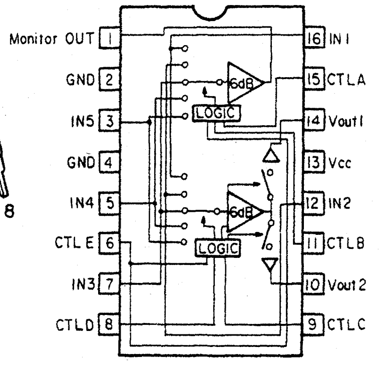



Vss 1
2
AD1 3
AD2 4
AD3 5
AD4 6
AD5 7
AD6 8
AD7 9
AD8 10
AD9 11
AD10 12
AD11 13
AD12 14
AD13 15
AD14 16
AD15 17
Vdd 18
19
RS 20
40 PNT
39
38 SGh
37 SGg
36 SGr
35 SGp
34 SGn
33 SGm
32 SGk
31 SGj
30 SGf
29 SGe
28 SGd
27
26 SGc
25 SGb
24
23 SGa
22 SCLK
21 DATA

Pin No.	Terminal Function
1	Power Supply (+5V)
3	Digit 1 Output
≀	≀
17	Digit 17 Output
18	GND
19	—
20	POWER-ON-RESET
21	Data Input
22	Shift Clock Input
23	Segment a Output
≀	≀
38	Segment h Output
39	—
40	POINT Output

BA7625 (RE: IC601, 651)
BA7626 (RE : IC652)




Monitor OUT 1
GND 2
IN5 3
GND 4
IN4 5
CTL E 6
IN3 7
CTLD 8
16 IN1
15 CTLA
14 Vout1
13 Vcc
12 IN2
11 CTLB
10 Vout2
9 CTLC
6dB
LOGIC
6dB
LOGIC

A	B	E	MONITOR OUT
L	L	*	IN 1
H	L	*	IN 2
L	H	*	IN 3
H	H	L	IN 4
H	H	H	IN 5

C	D	E	V OUT 1
L	L	*	—
H	L	*	IN 2
L	H	*	IN 3
H	H	L	IN 4
H	H	H	IN 5

C	D	E	V OUT 2
L	L	*	IN 1
H	L	*	—
L	H	*	IN 3
H	H	L	IN 4
H	H	H	IN 5

Note 1: * mark means that feasible for either H or L.

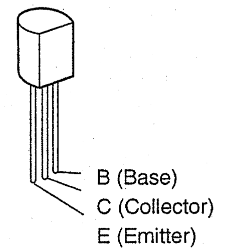
Note 2: Each input terminal is provided with sink chip clamp. (BA7625)

Each input terminal takes 20kohm at the end. (BA7626)

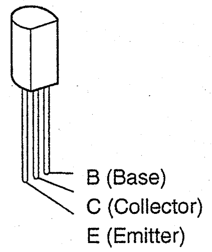
Truth value table

- **TRANSISTORS**

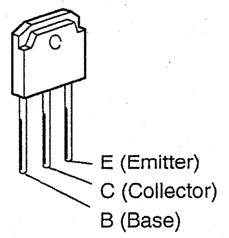
2SA970 (BL)
2SA988 (E/F)
2SC1015 (GR)
2SC1815 (Y),(BL)
2SC1841 (E/F)
2SC2878 (A/B)


B (Base)
C (Collector)
E (Emitter)

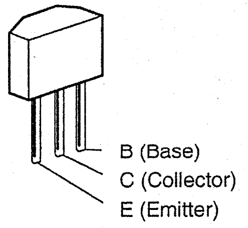
2SB647A (C)
2SD667A (C)


B (Base)
C (Collector)
E (Emitter)

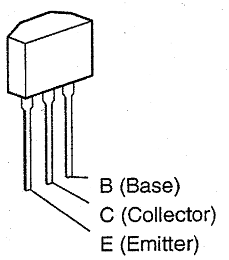
2SA1491 (O/P/Y) (Z)
2SC3855 (O/P/Y) (Z)


C
E (Emitter)
C (Collector)
B (Base)

2SA1048 (GR)
2SC2458 (BL)

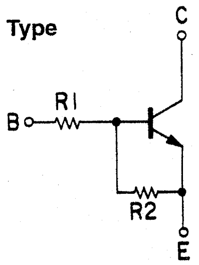

B (Base)
C (Collector)
E (Emitter)

RN1201
RN1204
RN2201


B (Base)
C (Collector)
E (Emitter)

RN1201
RN1204

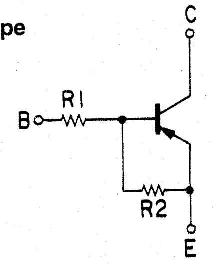
NPN Type



	R1	R2
RN1201	4.7 kohm	4.7 kohm
RN1204	47 kohm	47kohm

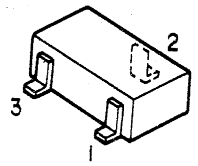
RN2201

PNP Type



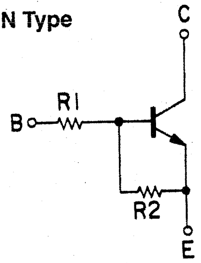
	R1	R2
RN2201	4.7 kohm	4.7 kohm

DTC144EK



1 : GND/Emitter
2 : Out/Collector
3 : In/Base

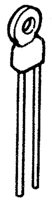
NPN Type



	R1	R2
DTC144EK	47 kohm	47 kohm

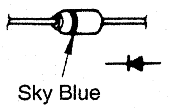
- **POSISTOR**

PTH9M04BB222TS2F333
(RE : PT501)

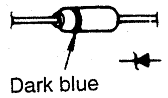


- **DIODES (included LED)**

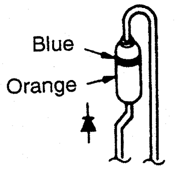
1SS270A
1S2076A



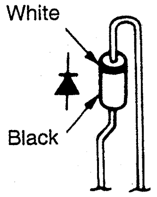
HZS3C-1 HZS9A-1
HZS7C-1 HZS12A-1
HZS7B-1 HZS12B-1



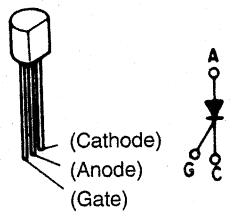
1SR35-200A


Blue
Orange

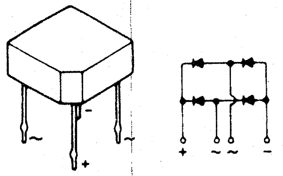
DSM1D2 (Type 3)


White
Black

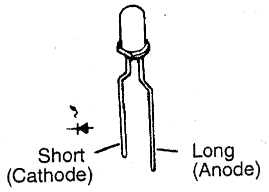
SF0R1A42 (Thyristor)


(Cathode)
(Anode)
(Gate)
A
G
C

4D4B42 (LC1) (MA: D351)
S4VB20F (RE: D502)

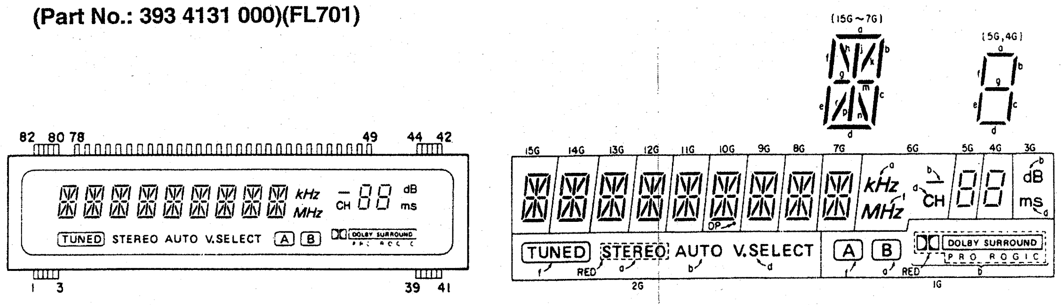


SEL1210S (Red)
(RE: LD701)


Short
(Cathode)
Long
(Anode)

- **FL DISPLAY FIP14PM8**

(Part No.: 393 4131 000)(FL701)


(15G~7G)
(5G,4G)
82 80 78
49 44 42
1 3
39 41
kHz
MHz
CH
dB
ms
TUNED
STEREO
AUTO
V.SELECT
A
B
DOLBY SURROUND
PRO LOGIC
RED
15G
14G
13G
12G
11G
10G
9G
8G
7G
6G
5G
4G
3G
2G
1G

11	21	31	41	51
12	22	32	42	52
13	23	33	43	53
14	24	34	44	54
15	25	35	45	55
16	26	36	46	56
17	27	37	47	57

5 × 7 Dot inner connections.

(UPPER)

TERMINAL No. ELECTRODE	82 F1	81 F1	80 F1	79 NP	78 P DP	77 P h	76 P g	75 P r	74 P p	73 P n	72 P m									
TERMINAL No. ELECTRODE	71 P k	70 P j	69 P f	68 P e	67 P d	66 P c	65 P b	64 P a	63 15G	62 14G	61 13G	60 12G	59 11G	58 10G	57 9G	56 8G	55 7G	54 6G	53 5G	52 4G
TERMINAL No. ELECTRODE											51 3G	50 2G	49 1G	48 NP	47 NP	46 NP	45 NP	44 F2	43 F2	42 F2

(LOWER)

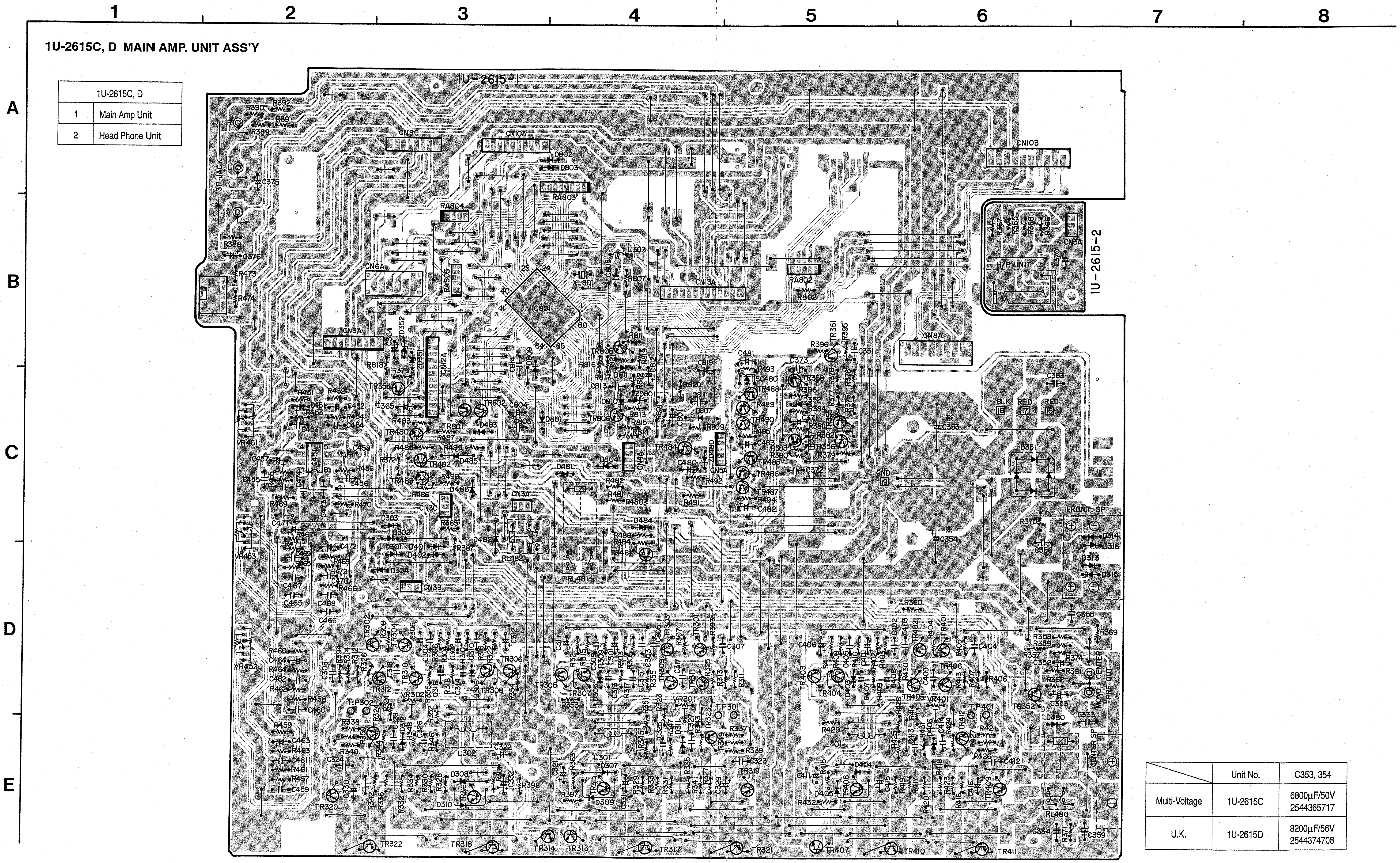
TERMINAL No. ELECTRODE									(27)	(37)	32 NP (47)	33 NP (57)	34 NP	35 NP	36 NP	37 NP	38 NP	39 F2	40 F2	41 F2
TERMINAL No. ELECTRODE	12 NP	13 NP	14 NP	15 NP	16 NP	17 NP	18 NP	19 NP	20 NP	21 NP	22 NP	23 NP	24 NP	25 NP	26 NP	27 NP	28 NP	29 NP	30 NP	31 NP
TERMINAL No. ELECTRODE	1 F1	2 F1	3 F1	4 NP	5 NP	6 NP	7 NP	8 NP	9 NP	10 NP	11 NP	12								

Notes: F: Filament NP: No-Pin
G: Grid
P: Anode

PRINTED WIRING BOARD (Pattern side)

1U-2615C, D MAIN AMP. UNIT ASS'Y

1U-2615C, D	
1	Main Amp Unit
2	Head Phone Unit

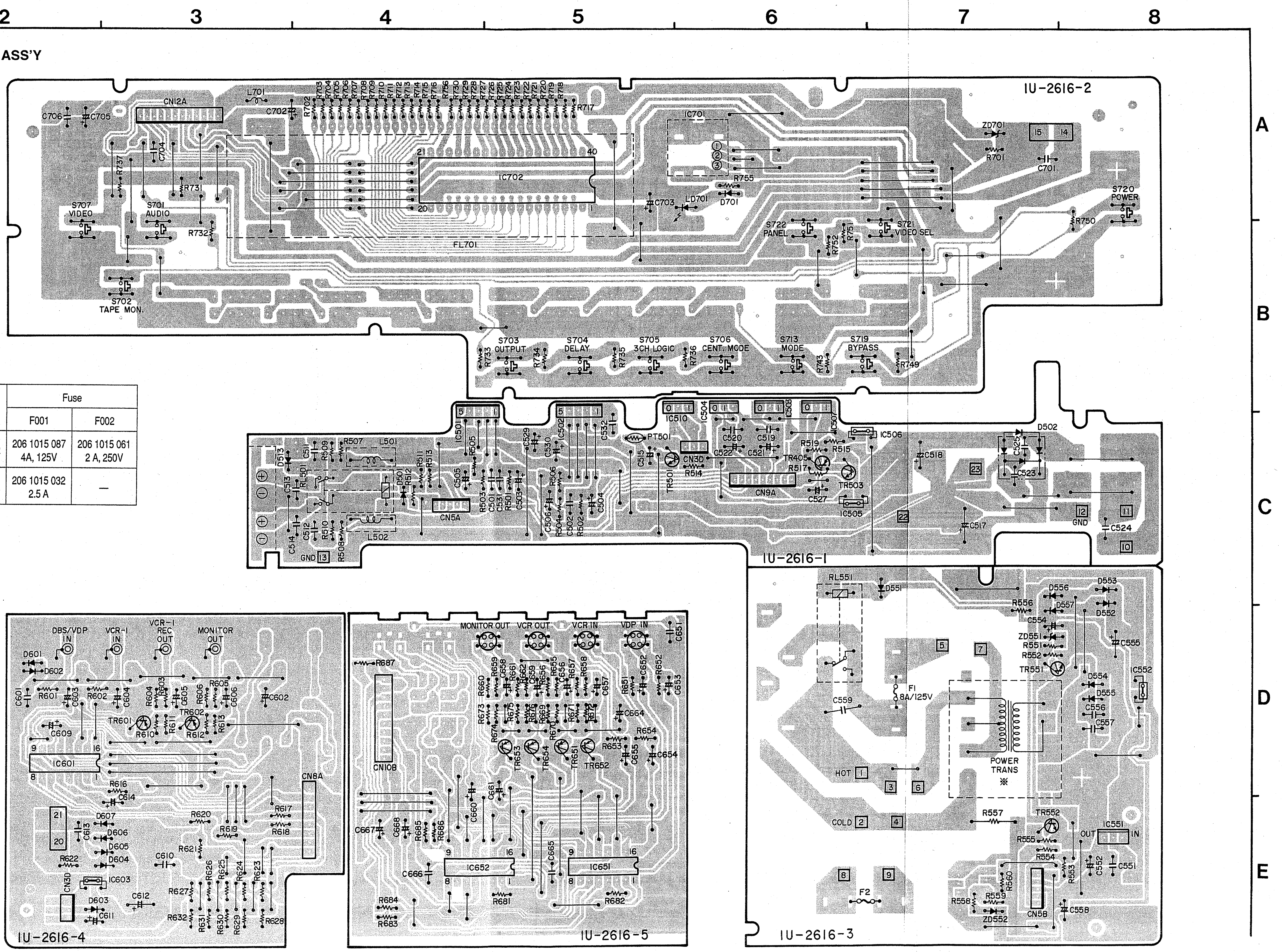

1
2
3
4
5
6
7
8
A
B
C
D
E
1U-2615-1
IU-2615-2
H/P UNIT
3P JACK
R
L
V
CN8C
CN10A
CN10B
CN3A
CN6A
CN9A
CN12A
CN8A
CN4A
CN5A
CN3C
CN3B
IC801
XL801
RA802
RA803
RA804
RA805
L301
L302
L303
L401
RL480
RL481
RL482
VR301
VR302
VR401
VR451
VR452
VR453
T.P301
T.P302
T.P401
D351
GND
BLK
RED
FRONT SP
CENTER SP
MONO CENTER PRE OUT
C353
C354
※

	Unit No.	C353, 354
Multi-Voltage	1U-2615C	6800µF/50V 2544365717
U.K.	1U-2615D	8200µF/56V 2544374708

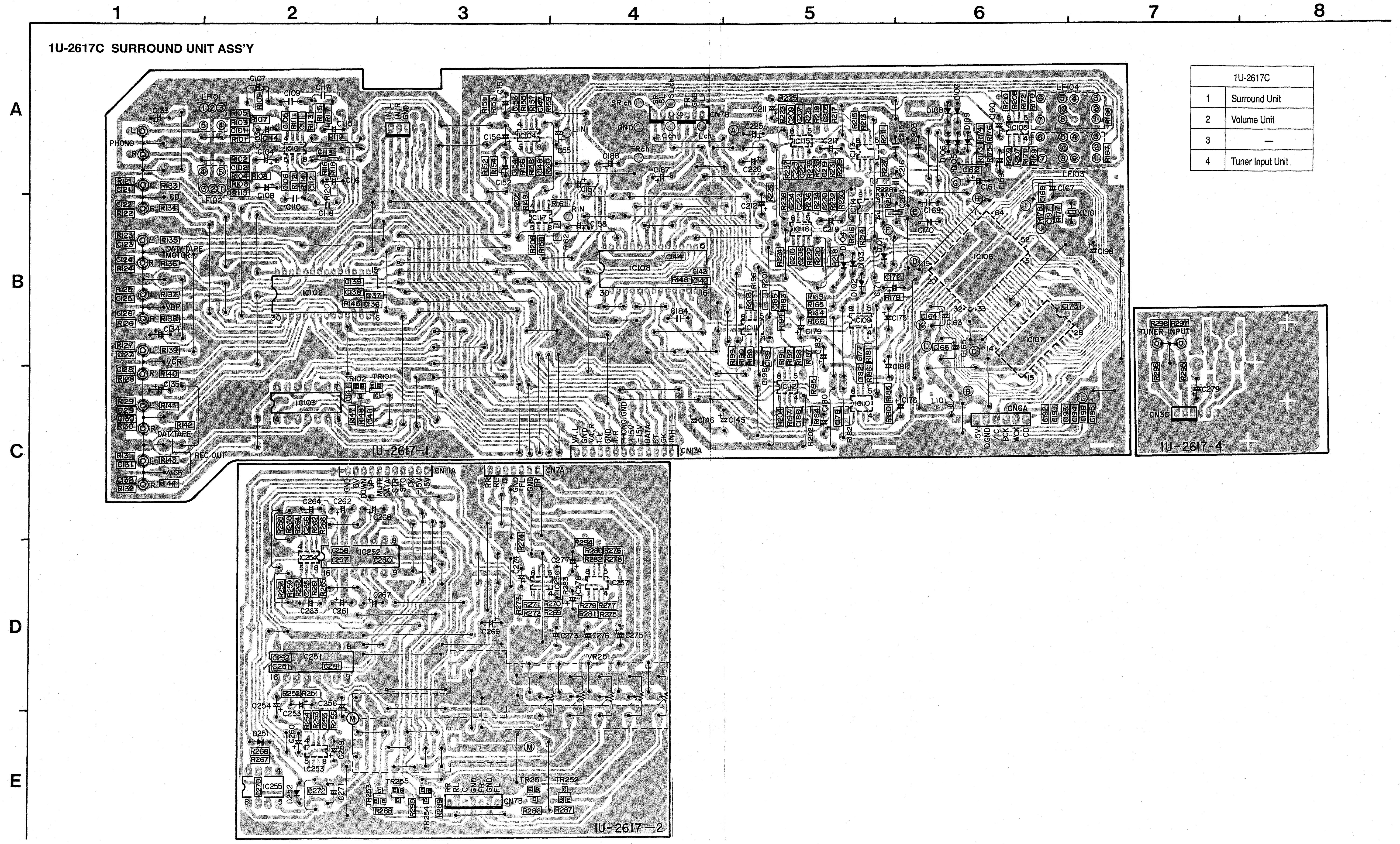
1U-2616C, D REAR AMP. UNIT ASS'Y

1U-2616C, D	
1	Rear Amp. Unit
2	MFD Unit
3	Power Supply Unit
4	Video Unit
5	S-Video Unit
6	Voltage Sel. Unit

	Unit No.	Power Trans	Fuse	
			F001	F002
Multi-Voltage	1U-2616C	233 6068 002	206 1015 087 4A, 125V	206 1015 061 2 A, 250V
U.K.	1U-2616D	233 6071 002	206 1015 032 2.5 A	—


1
2
3
4
5
6
7
8
A
B
C
D
E
1U-2616-2
CN12A
L701
C706
C705
C704
C702
R737
R731
R732
R717
IC702
FL701
IC701
LD701
D701
R755
C703
ZD701
R701
C701
S707 VIDEO
S701 AUDIO
S702 TAPE MON.
S720 POWER
S722 PANEL
S721 VIDEO SEL
R750
S703 OUTPUT
S704 DELAY
S705 3CH LOGIC
S706 CENT. MODE
S713 MODE
S719 BYPASS
R733
R734
R735
R736
R743
R749
1U-2616-1
IC501
IC502
IC510
IC505
IC506
PT501
CN30
CN9A
CN5A
TR501
TR503
TR405
L501
L502
RL501
D501
D502
D513
C517
C518
C523
C524
GND
1U-2616-4
DBS/VDP IN
VCR-1 IN
VCR-1 REC OUT
MONITOR OUT
IC601
IC603
TR601
TR602
CN8A
CN30
D601
D602
D603
D604
D605
D606
D607
1U-2616-5
MONITOR OUT
VCR OUT
VCR IN
VDP IN
CN10B
IC652
IC651
TR651
TR652
TR653
TR654
1U-2616-3
RL551
D551
D552
D553
D556
D557
ZD551
ZD552
TR551
TR552
IC551
IC552
F1 8A/125V
F2
C559
POWER TRANS
※
HOT
COLD
OUT
IN
CN5B

1U-2617C SURROUND UNIT ASS'Y


1
2
3
4
5
6
7
8
A
B
C
D
E
PHONO
CD
DAT/TAPE MOTOR
VDP
VCR
DAT/TAPE
REC OUT
LF101
LF102
IC101
IC102
IC103
IC104
IC105
IC106
IC107
IC108
IC109
IC110
IC111
IC112
IC114
IC115
IC116
IC117
TR101
TR102
SR ch
GND
FR ch
C ch
FL ch
SL ch
CN7B
CN13A
CN6A
XL101
LF103
LF104
L101
IN
RIN
1U-2617-1
CN11A
CN7A
IC251
IC252
IC253
IC255
IC256
IC257
VR251
D251
D252
TR251
TR252
TR253
TR254
TR255
1U-2617-2
TUNER INPUT
CN3C
1U-2617-4

1U-2617C	
1	Surround Unit
2	Volume Unit
3	—
4	Tuner Input Unit

NOTE FOR PARTS LIST

- Part indicated with the mark " ◉ " are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.
- When ordering of part, clearly indicate "1" and "I" (i) to avoid mis-supplying.
- Ordering part without stating its part number can not be supplied.
- Part indicated with the mark "★" is not illustrated in the exploded view.
- Not including Carbon Film ±5%, 1/4W Type in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)

WARNING:

Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

● Resistors

Ex.:

RN	14K	2E	182	G	FR
Type	Shape and performance	Power	Resistance	Allowable error	Others

RD : Carbon RC : Composition RS : Metal oxide film RW : Winding RN : Metal film RK : Metal mixture	2B : 1/8W 2E : 1/4W 2H : 1/2W 3A : 1W 3D : 2W 3F : 3W 3H : 5W	F : ±1% G : ±2% J : ±5% K : ±10% M : ±20%	P : Pulse-resistant type NL : Low noise type NB : Non-burning type FR : Fuse-resistor F : Lead wire forming

*** Resistance**

1 8 2 ⇒ 1800 ohm = 1.8 kohm
Indicates number of zeros after effective number.
2-digit effective number.

- Units: ohm

1 R 2 ⇒ 1.2 ohm
1-digit effective number.
2-digit effective number, decimal point indicated by R.

- Units: ohm

● Capacitors

Ex.:

CE	04W	1H	2R2	M	BP
Type	Shape and performance	Dielectric strength	Capacity	Allowable error	Others

CE : Aluminum foil electrolytic CA : Aluminum solid electrolytic CS : Tantalum electrolytic CQ : Film CK : Ceramic CC : Ceramic CP : Oil CM : Mica CF : Metallized CH : Metallized	0J : 6.3V 1A : 10V 1C : 16V 1E : 25V 1V : 35V 1H : 50V 2A : 100V 2B : 125V 2C : 160V 2D : 200V 2E : 250V 2H : 500V 2J : 630V	F : ±1% G : ±2% J : ±5% K : ±10% M : ±20% Z : +80% −20% P : +100% −0% C : ±0.25pF D : ±0.5pF = : Others	HS : High stability type BP : Non-polar type HR : Ripple-resistant type DL : For charge and discharge HF : For assuring high frequency U : UL part C : CSA part W : UL-CSA type F : Lead wire forming

*** Capacity (electrolyte only)**

2 2 2 ⇒ 2200μF
Indicates number of zeros after effective number.
2-digit effective number.

- Units: μF.

2 R 2 ⇒ 2.2μF
1-digit effective number.
2-digit effective number, decimal point indicated by R.

- Units: μF.

*** Capacity (except electrolyte)**

2 2 2 ⇒ 2200pF = 0.0022μF
(More than 2) — Indicates number of zeros after effective number.
2-digit effective number.

- Units: μF.

2 2 1 ⇒ 220pF
(0 or 1) — Indicates number of zeros after effective number.
2-digit effective number.

- Units: pF.

- When the dielectric strength is indicated in AC, "AC" is included after the dieelectric strength value.

P.W.B. ASS'Y PARTS LIST
1U-2615C, D MAIN UNIT ASS'Y (C : Multi-Voltage, D : U.K.)

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS			
IC451	263 0322 004	IC BA4558	
IC801	262 1839 108	IC TMP87CK70AF-****	µ-com
TR301~304	271 0094 919	Transistor 2SA970(BL)	
TR305,306	271 0131 924	Transistor 2SA988(E/F)	
TR307~312	273 0235 923	Transistor 2SC1841(E/F)	
TR313,314	273 0198 002	Transistor 2SC1815(Y)	
TR315,316	274 0060 900	Transistor 2SD667A(C)	
TR319,320	272 0053 908	Transistor 2SB647A(C)	
TR323,324	273 0235 923	Transistor 2SC1841(E/F)	
TR351	271 0131 924	Transistor 2SA988(E/F)	
TR352	273 0253 918	Transistor 2SC2878(A/B)	
TR353	272 0053 908	Transistor 2SB647A(C)	
TR355,356	271 0131 924	Transistor 2SA988(E/F)	
TR357	273 0235 923	Transistor 2SC1841(E/F)	
TR358	271 0131 924	Transistor 2SA988(E/F)	
TR401,402	271 0094 919	Transistor 2SA970(BL)	
TR403	271 0131 924	Transistor 2SA988(E/F)	
TR404~406	273 0235 923	Transistor 2SC1841(E/F)	
TR407	273 0198 002	Transistor 2SC1815(Y)	
TR408	274 0060 900	Transistor 2SD667A(C)	
TR409	272 0053 908	Transistor 2SB647A(C)	
TR412	273 0235 923	Transistor 2SC1841(E/F)	
TR480~485	273 0317 906	Transistor 2SC2458(BL)	
TR486	271 0191 906	Transistor 2SA1048(GR)	
TR487,488	273 0317 906	Transistor 2SC2458(BL)	
TR489	271 0191 906	Transistor 2SA1048(GR)	
TR490	273 0317 906	Transistor 2SC2458(BL)	
TR801	269 0024 902	Transistor RN2201	Built in Resistor
TR802	269 0029 907	Transistor RN1204	Built in Resistor
TR805	273 0198 918	Transistor 2SC1815(BL)	
TR806	269 0023 903	Transistor RN1201	Built in Resistor
D301~306	276 0432 903	Diode 1SS270A	
D307~310	276 0049 914	Diode 1S2076A	
D311~316	276 0432 903	Diode 1SS270A	
⚠ D351	276 0424 005	Diode 4D4B42(LC1)	Bridge
D352	276 0432 903	Diode 1SS270A	
D401~403	276 0432 903	Diode 1SS270A	
D404,405	276 0049 914	Diode 1S2076A	
D406	276 0432 903	Diode 1SS270A	
D480,481	276 0432 903	Diode 1SS270A	
D482	276 0049 914	Diode 1S2076A	
D483,484	276 0432 903	Diode 1SS270A	
D485	276 0049 914	Diode 1S2076A	
D486	276 0432 903	Diode 1SS270A	
D801~804	276 0432 903	Diode 1SS270A	
D807	276 0049 914	Diode 1S2076A	
D809~811	276 0432 903	Diode 1SS270A	
ZD351,352	276 0473 904	Zener Diode HZS12A-1	12V
ZD480	276 0466 908	Zener Diode HZS7C-1	7V
ZD801	276 0454 907	Zener Diode HZS3C-1	3V
SC480	279 0016 904	Thyrister SF0R1A42	

Ref. No.	Part No.	Part Name	Remarks
RESISTORS GROUP			
(Not included Carbon Film ±5% 1/4 W Type. Refer to the Schematic Diagram for those parts.)			
⚠ R311~314	241 2380 963	Carbon Film 2.2kohm 1/4W(NB)	RD14B2E222JNBS
⚠ R317,318	241 2377 976	Carbon Film 130ohm 1/4W(NB)	RD14B2E131JNBS
⚠ R325,326	241 2315 967	Fusible 68ohm 1/4W(NB)	RD14B2E680GFRS
⚠ R327,328	241 2378 920	Carbon Film 220ohm 1/4W(NB)	RD14B2E221JNBS
⚠ R329~336	244 2043 982	Metal Oxide 0.22ohm 1W(NB)	RS14B3AR22JNBS(S)
⚠ R341~344	241 2380 950	Carbon Film 2kohm 1/4W(NB)	RD14B2E202JNBS
⚠ R345,346	244 2051 987	Metal Oxide 4.7ohm 1W(NB)	RS14B3A4R7JNBS(S)
⚠ R355,356	241 2377 976	Carbon Film 130ohm 1/4W(NB)	RD14B2E131JNBS
⚠ R365~368	244 2051 958	Metal Oxide 220ohm 1W(NB)	RS14B3A221JNBS(S)
⚠ R369~371	244 2051 987	Metal Oxide 4.7ohm 1W(NB)	RS14B3A4R7JNBS(S)
⚠ R372	241 2376 964	Carbon Film 47ohm 1/4W(NB)	RD14B2E470JNBS
⚠ R375~378	244 2043 982	Metal Oxide 0.22ohm 1W(NB)	RS14B3AR22JNBS(S)
⚠ R406,407	241 2380 963	Carbon Film 2.2kohm 1/4W(NB)	RD14B2E222JNBS
⚠ R409	241 2377 976	Carbon Film 130ohm 1/4W(NB)	RD14B2E131JNBS
⚠ R413	241 2315 967	Fusible 68ohm 1/4W(NB)	RD14B2E680GFRS
⚠ R416	241 2378 920	Carbon Film 220ohm 1/4W(NB)	RD14B2E221JNBS
⚠ R417~420	244 2043 982	Metal Oxide 0.22ohm 1W(NB)	RS14B3AR22JNBS(S)
⚠ R423,424	241 2380 950	Carbon Film 2kohm 1/4W(NB)	RD14B2E202JNBS
⚠ R425	244 2051 987	Metal Oxide 4.7ohm 1W(NB)	RS14B3A4R7JNBS(S)
⚠ R430	241 2377 976	Carbon Film 130ohm 1/4W(NB)	RD14B2E131JNBS
⚠ R480,481	241 2376 964	Carbon Film 47ohm 1/4W(NB)	RD14B2E470JNBS
⚠ R482	244 2051 974	Metal Oxide 1kohm 1W(NB)	RS14B3A102JNBS(S)
⚠ R491	244 2050 988	Metal Oxide 2kohm 1W(NB)	RS14B3A202JNBS(S)
⚠ R809	241 2387 940	Carbon Film 4.7ohm 1/4W(NB)	RD14B2E4R7JNBS
VR301,302	211 6093 912	Semi Fixed VR 4.7kohm	V06PB472
VR401	211 6093 912	Semi Fixed VR 4.7kohm	V06PB472
VR451	211 0798 103	Variable Resister 100kohm	Balance
VR452	211 0797 117	Variable Resister 30kohm	Bass
VR453	211 0797 104	Variable Resister 5kohm	Treble
RA802	246 2052 005	Resister Array 10kohm ×4	RK99==103JP4
RA803	246 2054 003	Resister Array 10kohm ×7	RK99==103JP7
RA804	246 2076 023	Resister Array 1.5kohm ×3	RK99==152JP3
RA805	246 2052 018	Resister Array 4.7kohm ×4	RK99==472JP4
CAPACITORS GROUP			
C301,302	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C303,304	253 1179 903	Ceramic 100pF/50V	CK45B1H101K
C305,306	253 1179 945	Ceramic 220pF/50V	CK45B1H221K
C307,308	255 1264 966	Plastic Film 0.0033µF/50V	CQ93M1H332J(B)
C309,310	253 4536 983	Ceramic 22pF/50V	CC45SL1H220J
C311,312	254 4256 952	Electrolytic 220µF/25V	CE04W1E221M
C313~316	255 1264 908	Plastic Film 0.001µF/50V	CQ93M1H102J(B)
C317,318	253 4470 900	Ceramic 10pF/500V	CC45SL2H100D
C321,322	254 4260 948	Electrolytic 1µF/50V	CE04W1H010M
C323,324	253 1128 909	Ceramic 220pF/500V	CK45B2H221K
C325,326	256 1034 979	Metalized 0.1µF/50V	CF93A1H104J
C327,328	255 1265 936	Plastic Film 0.01µF/50V	CQ93M1H103J(B)
C329~332	254 4262 904	Electrolytic 4.7µF/63V	CE04W1J4R7M
C333~335	253 1146 907	Ceramic 0.01µF/50V	CK45F1H103Z
C351	255 1265 936	Plastic Film 0.01µF/50V	CQ93M1H103J(B)
C352,353	254 4254 941	Electrolytic 100µF/16V	CE04W1C101M
C353,354	254 4365 717	Electrolytic 6800µF/56V	CE04W==682MC(DL) Multi-Voltage model
C353,354	254 4374 708	Electrolytic 8200µF/56V	CE04W==822MC(DL) U.K. model

Ref. No.	Part No.	Part Name	Remarks
C355,356	256 1034 979	Metalized 0.1µF/50V	CF93A1H104J
C359	256 1034 979	Metalized 0.1µF/50V	CF93A1H104J
C363	256 1042 903	Metalized 0.1µF/250V	CF93A2E104K
C364,365	254 4260 948	Electrolytic 1µF/50V	CE04W1H010M
C370	253 1182 903	Ceramic 0.047µF/12V	CK45F==473Z
C371	254 4258 918	Electrolytic 10µF/35V	CE04W1V100M
C372,373	256 1034 979	Metalized 0.1µF/50V	CF93A1H104J
C375,376	254 4260 948	Electrolytic 1µF/50V	CE04W1H010M
C401	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C402	253 1179 903	Ceramic 100pF/50V	CK45B1H101K
C403	253 1179 945	Ceramic 220pF/50V	CK45B1H221K
C404	255 1264 966	Plastic Film 0.0033µF/50V	CQ93M1H332J(B)
C405	253 4536 983	Ceramic 22pF/50V	CC45SL1H220J
C406	254 4256 952	Electrolytic 220µF/25V	CE04W1E221M
C407,408	255 1264 908	Plastic Film 0.001µF/50V	CQ93M1H102J(B)
C409	253 4470 900	Ceramic 10pF/500V	CC45SL2H100D
C411	254 4260 948	Electrolytic 1µF/50V	CE04W1H010M
C412	253 1128 909	Ceramic 220pF/500V	CK45B2H221K
C413	256 1034 979	Metalized 0.1µF/50V	CF93A1H104J
C414	255 1265 936	Plastic Film 0.01µF/50V	CQ93M1H103J(B)
C415,416	254 4262 904	Electrolytic 4.7µF/63V	CE04W1J4R7M
C451,452	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C453~456	253 1179 903	Ceramic 100pF/50V	CK45B1H101K
C457,458	254 4254 938	Electrolytic 47µF/16V	CE04W1C470M
C459,460	255 1264 908	Plastic Film 0.001µF/50V	CQ93M1H102J(B)
C461,462	256 1034 995	Metalized 0.15µF/50V	CF93A1H154J
C463,464	254 4260 948	Electrolytic 1µF/50V	CE04W1H010M
C465,466	255 1264 937	Plastic Film 0.0018µF/50V	CQ93M1H182J(B)
C467,468	255 1265 949	Plastic Film 0.012µF/50V	CQ93M1H123J(B)
C469,470	256 1034 953	Metalized 0.068µF/50V	CF93A1H683J
C471,472	254 4260 935	Electrolytic 0.47µF/50V	CE04W1HR47M
C473	256 1034 937	Metalized 0.047µF/50V	CF93A1H473J
C474	253 1181 917	Ceramic 0.022µF/50V	CK45F1H223Z
C480	254 4260 980	Electrolytic 10µF/50V	CE04W1H100M
C481	254 4260 993	Electrolytic 22µF/50V	CE04W1H220M
C482,483	254 4250 945	Electrolytic 330µF/6.3V	CE04W0J331M
C803	253 1181 904	Ceramic 0.01µF/50V	CK45F1H103Z
C804	254 4250 932	Electrolytic 220µF/6.3V	CE04W0J221M
C805	256 1034 982	Metalized 0.12µF/50V	CF93A1H124J
C811	253 1181 904	Ceramic 0.01µF/50V	CK45F1H103Z
C812	254 4258 905	Electrolytic 4.7µF/35V	CE04W1V4R7M
C813	255 1265 936	Plastic Film 0.01µF/50V	CQ93M1H103J(B)
C814	253 1181 904	Ceramic 0.01µF/50V	CK45F1H103Z
C819	254 4250 783	Electrolytic 3300µF/6.3V	CE04W0J332MC

OTHER GROUP				Q'ty
	—	(P.W.Board)		1
L301,302	235 0068 004	Inductor 1µH		2
L303	235 0060 989	Inductor 120µH		1
L401	235 0068 004	Inductor 1 µH		1
RL480	214 0167 005	Relay(G5Z-2A)		1
RL481	214 9003 005	Relay		1
RL482	214 0162 000	Relay(A12W-K)		1
XL801	399 0191 903	Ceramic Resonator	CST 4.00MGW19MGW	1
	204 8354 004	Headphone Jack		
	205 0550 003	4P Terminal	Front	1
	205 0695 007	2P Push Terminal(V-1)	Center	1

Ref. No.	Part No.	Part Name	Remarks	Q'ty
	204 8404 006	3P Pin Jack	V-AUX	1
	205 0315 002	2P Connector Base	Pre- Out	1
	205 0578 001	S-Terminal		1
	415 0309 071	PVC Tube(L=10)		6
CN3A	205 0343 032	3P Conn. Base(KR-PH)		2
CN4A	205 0343 045	4P Conn. Base(KR-PH)		1
CN5A	205 0343 058	5P Conn. Base(KR-PH)		1
CN6A	205 0696 064	JL Connector(BT-E)		1
	205 0696 006	JL Connector(BT-E)-10P		1
CN8A	205 0696 080	JL Connector(BT-E)		1
CN8C	205 0535 002	8P Conn. Base		1
CN9A	205 0343 090	9P Conn. Base(KR-PH)		1
CN10A	205 0535 057	10P Conn. Base		1
CN12A	205 0375 026	12P Conn. Base(KR-PH)		1
CN13A	205 0707 005	13P Conn. Base		1

1U-2616C, D REAR AMP. UNIT ASS'Y (C : Multi-Voltage, D : U.K.)

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS			
IC501,502	263 0855 005	IC SI-18752	
IC503	263 0812 006	IC NJM7815FA(S)	Regulator +15V
IC504	263 0561 001	IC NJM7915FA	Regulator -15V
IC505,506	268 0074 904	IC ICP-N20	IC Protector 20V
IC507	263 0809 006	IC NJM7805FA(S)	Regulator +5V
IC510	263 0809 006	IC NJM7805FA(S)	Regulator +5V
IC551	263 0793 002	IC NJM7806FA(S)	Regulator +6V
IC552	268 0073 905	IC ICP-N15	IC Protector 15V
IC601	263 0856 004	IC BA7625	
IC603	268 0073 905	IC ICP-N15	IC Protector 15V
IC651	263 0856 004	IC BA7625	
IC652	263 0857 003	IC BA7626	
IC701	499 0150 008	IC SBX1610-52	Remocon Receiver
IC702	262 1564 004	IC MSC1937-01	µ-com
TR501	273 0198 918	Transistor 2SC1815(BL)	
TR503	269 0023 903	Transistor RN1201	Built in Resistor
TR504	272 0053 908	Transistor 2SB647A(C)	
TR551,552	273 0317 906	Transistor 2SC2458(BL)	
TR601,602	271 0102 924	Transistor 2SA1015(GR)	
TR651~654	271 0102 924	Transistor 2SA1015(GR)	
D501	276 0432 903	Diode 1SS270A	
⚠ D502	276 0305 001	Diode S4VB20	Bridge
D551	276 0432 903	Diode 1SS270A	
D552~557	276 0553 905	Diode 1SR35-200A	
D601~603	276 0432 903	Diode 1SS270A	
D604~607	276 0548 910	Diode DSM1D2(Type-3)	
D701	276 0432 903	Diode 1SS270A	
ZD551	276 0465 909	Zener Diode HZS7B-1	7V
ZD701	276 0467 907	Zener Diode HZS9A-1	9V
PT501	279 0034 067	Thermistor PTH9M04BB222TS2F333	
LD701	393 9434 906	LED SEL1210S	Red
FL701	393 4131 000	FLD (FIP14PM8) Ass'y	
RESISTORS GROUP			
(Not included Carbon Film ±5% 1/4 W Type. Refer to the Schematic Diagram for those parts.)			
⚠ R509,510	244 2051 987	Metal Oxide 4.7ohm 1W(NB)	RS14B3A4R7JNBS(S)
⚠ R513	241 2376 964	Carbon Film 47ohm 1/4W(NB)	RD14B2E470JNBS
⚠ R515	241 2387 940	Carbon Film 4.7ohm 1/4W(NB)	RD14B2E4R7JNBS
⚠ R556	241 2375 978	Carbon Film 20ohm 1/4W(NB)	RD14B2E200JNBS
⚠ R622	241 2387 908	Carbon Film 1ohm 1/4W(NB)	RD14B2E010JNBS
CAPACITORS GROUP			
C501,502	253 1179 903	Ceramic 100pF/50V	CK45B1H101K
C503,504	254 4260 951	Electrolytic 2.2µF/50V	CE04W1H2R2M
C505,506	254 4254 938	Electrolytic 47µF/16V	CE04W1C470M
C511,512	256 1034 979	Metalized 0.1µF/50V	CF93A1H104J
C513,514	253 1181 904	Ceramic 0.01µF/50V	CK45F1H103Z
C515	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C517,518	254 4259 014	Electrolytic 3300µF/35V	CE04W1V332M
C519,520	253 1181 904	Ceramic 0.01µF/50V	CK45F1H103Z
C521,522	254 4258 918	Electrolytic 10µF/35V	CE04W1V100M
C524	256 1042 903	Metalized 0.1µF/250V	CF93A2E104K
C526	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C529,530	254 4260 948	Electrolytic 1µF/50V	CE04W1H010M
C533	253 1146 907	Ceramic 0.01µF/50V	CK45F1H103Z
C534	254 4260 948	Electrolytic 1µF/50V	CE04W1H010M
C551	253 1181 904	Ceramic 0.01µF/50V	CK45F1H103Z
C552	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C554	254 4260 948	Electrolytic 1µF/50V	CE04W1H010M
C555	254 4256 790	Electrolytic 2200µF/25V	CE04W1E222MC
C556,557	253 1181 904	Ceramic 0.01µF/50V	CK45F1H103Z
C558	254 4260 948	Electrolytic 1µF/50V	CE04W1H010M
⚠ C559	253 8014 702	Ceramic 0.01µF/400V(AC)	CK45F2GAC103MC
C601	253 9039 906	BC Ceramic 0.1µF/25V	CK45=1E104Z
C602	254 4260 948	Electrolytic 1µF/50V	CE04W1H010M
C603,604	254 4258 905	Electrolytic 4.7µF/35V	CE04W1V4R7M
C605,606	254 4250 958	Electrolytic 470µF/6.3V	CE04W0J471M
C609	254 4252 930	Electrolytic 100µF/10V	CE04W1A101M
C610	253 1181 904	Ceramic 0.01µF/50V	CK45F1H103Z
C611	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C612	254 4254 792	Electrolytic 2200µF/16V	CE04W1C222MC
C613	253 1181 904	Ceramic 0.01µF/50V	CK45F1H103Z
C614	254 4258 905	Electrolytic 4.7µF/35V	CE04W1V4R7M
C651	253 1146 907	Ceramic 0.01µF/50V	CK45F1H103Z
C652~655	254 4258 905	Electrolytic 4.7µF/35V	CE04W1V4R7M
C656	254 4250 932	Electrolytic 220µF/6.3V	CE04W0J221M
C657	254 4250 958	Electrolytic 470µF/6.3V	CE04W0J471M
C658	254 4250 932	Electrolytic 220µF/6.3V	CE04W0J221M
C659	254 4250 958	Electrolytic 470µF/6.3V	CE04W0J471M
C664	254 4252 930	Electrolytic 100µF/10V	CE04W1A101M
C665,666	253 1181 917	Ceramic 0.022µF/50V	CK45F1H223Z
C667,668	254 4258 905	Electrolytic 4.7µF/35V	CE04W1V4R7M
C669	253 1146 907	Ceramic 0.01µF/50V	CK45F1H103Z
C701	256 1034 979	Metalized 0.1µF/50V	CF93A1H104J
C702	254 4261 921	Electrolytic 100µF/50V	CE04W1H101M
C703	254 4250 945	Electrolytic 330µF/6.3V	CE04W0J331M
C704	253 1146 907	Ceramic 0.01µF/50V	CK45F1H103Z

OTHER GROUP				Q'ty
	—	(P.W.Board)		1
L501,502	235 0068 004	Inductor 1µH		2
L701	235 0060 989	Indictor 120µH		1
RL501	214 0167 005	Relay(G5Z-2A)	Rear	1
⚠ RL551	214 0120 013	Relay(TV-8)	Pri.	1
S701~707	212 4388 907	Tact Switch		7
S718~722	212 4388 907	Tact Switch		5
⚠	212 2611 003	Slide Switch(Vol.Sel SW)	Multi-Voltage model only	2
⚠	233 6068 002	Power Trans(Mini)	Multi-Voltage model	1
⚠	233 6067 003	Power Trans(Mini)	U.K. model	1
	202 0022 008	Fuse Holder	Multi-Voltage model	4
	202 0022 008	Fuse Holder	U.K. model	2
⚠ F001	206 1015 087	Fuse 4.0A(T) 125V	Multi-Voltage model	1
⚠ F002	206 1015 061	Fuse 2A(T) 250V	Multi-Voltage model	1
⚠ F001	206 1015 032	Fuse 2.5A(T)	U.K. model	1

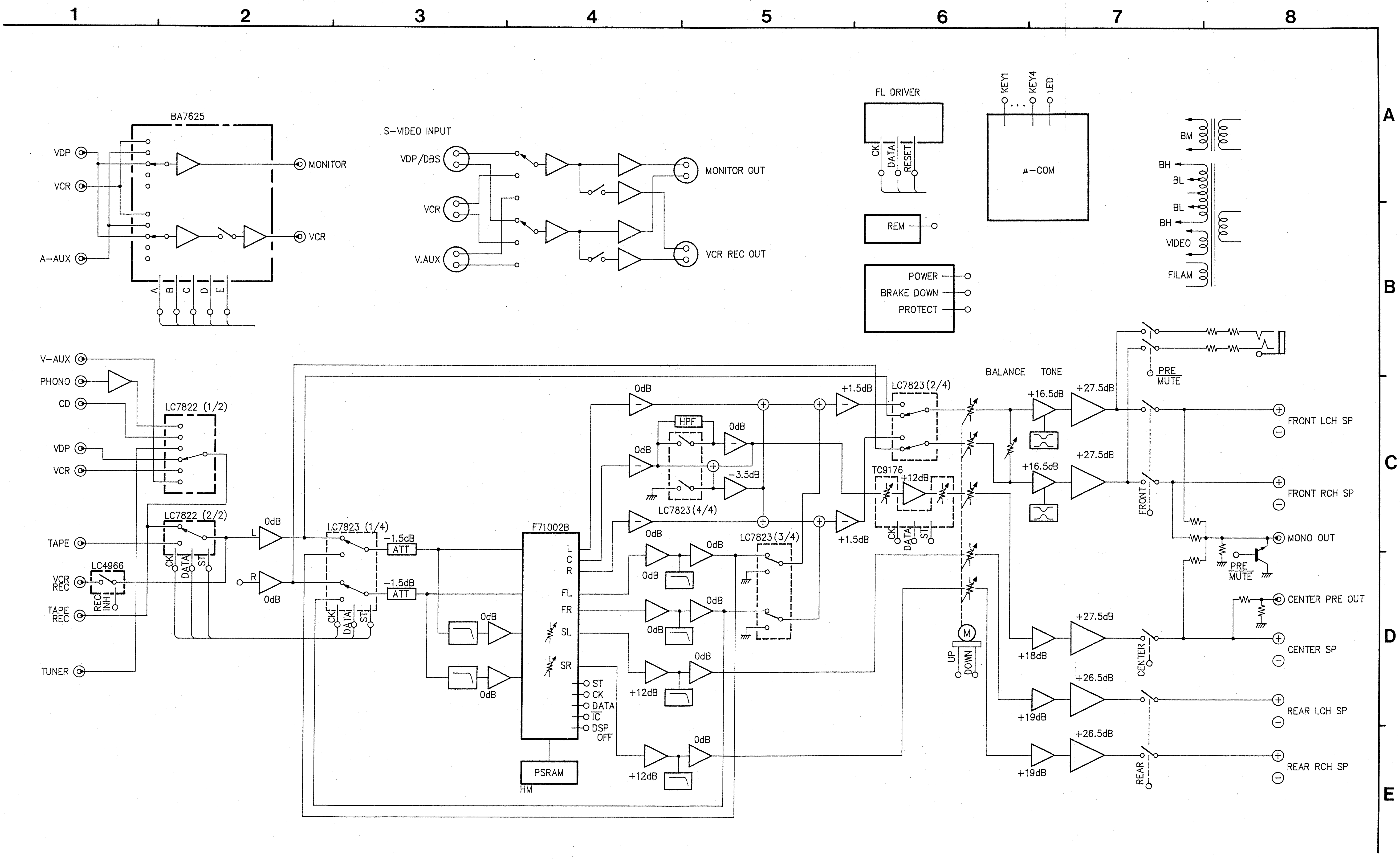
Ref. No.	Part No.	Part Name	Remarks	Q'ty
	513 2049 031	Fuse Label	Multi-Voltage model	1
	513 2049 044	Fuse Label	Multi-Voltage model	1
	513 2018 062	Fuse Label	U.K. model	1
	204 8309 004	4P Pin Jack(C-GND)	Video	1
	205 0592 003	4P Push Terminal	Rear	1
	205 0075 025	2P Terminal		2
	204 8414 012	2P S-Terminal		2
CN3D	205 0343 032	3P Conn. Base(KR-PH)		2
CN4A	205 0343 045	4P Conn. Base(KR-PH)		1
CN5A	205 0343 058	5P Conn. Base(KR-PH)		1
CN8A	205 0748 080	JL Connector(R)-8 P		1
CN9A	205 0343 090	9P Conn. Base(KR-PH)		1
CN12A	205 0375 026	12P Conn. Base(KR-PH)		1
	203 0418 000	1P SIN Cord Ass'y		1
	205 0748 006	JL Connector(R)-10 P		1
	415 0309 000	P.V.C. Tube(L=15)		2
	415 0299 000	Condenser Cover		1

1U-2617C SURROUND UNIT ASS'Y

Ref. No.	Part No.	Part Name	Remarks	Q'ty
SEMICONDUCTORS				
IC101	263 0672 903	IC BA4558F		
IC102	262 1227 008	IC LC7821		
IC103	263 0359 006	IC LC4966		
IC104,105	263 0672 903	IC BA4558F		
IC106	262 1609 105	IC F71002B		
IC107	262 1610 000	IC HM65256BLFP-10T	μ-com	
IC108	262 1229 006	IC LC7823		
IC109,110	263 0892 903	IC NJM2082M		
IC111,112	263 0898 907	IC NJM5532MD		
IC113,114	263 0892 903	IC NJM2082M		
IC115~117	263 0672 903	IC BA4558F		
IC251	262 0625 009	IC TC9176P		
IC253	263 0672 903	IC BA4558F		
IC255	263 0476 002	IC LB1639		
IC256,257	263 0672 903	IC BA4558F		
TR101	269 0054 901	Transistor DTC144EK	Built in Resistor	
D101~109	276 0432 903	Diode 1SS270A		
D251,252	276 0432 903	Diode 1SS270A		
RESISTORS GROUP				
(Not included Carbon Film ±5% 1/4 W Type. Refer to the Schematic Diagram for those parts.)				
R076~078	241 2400 995	Carbon Film 10kohm 1/4W	RD14B2E103J(5)	
R101,102	247 0006 946	Chip Carbon 390ohm 1/10W	RM73B--391J	
R103,104	247 0011 986	Chip Carbon 68kohm 1/10W	RM73B--683J	
R105,106	247 0012 969	Chip Carbon 150kohm 1/10W	RM73B--154J	
R107,108	247 0004 922	Chip Carbon 47ohm 1/10W	RM73B--470J	
R109,110	247 0007 945	Chip Carbon 1kohm 1/10W	RM73B--102J	
R111,112	247 0014 909	Chip Carbon 560kohm 1/10W	RM73B--564J	
R113,114	247 0011 944	Chip Carbon 47kohm 1/10W	RM73B--473J	
R115,116	247 0003 949	Chip Carbon 22ohm 1/10W	RM73B--220J	
R117,118	247 0005 905	Chip Carbon 100ohm 1/10W	RM73B--101J	
R119,120	247 0013 984	Chip Carbon 470kohm 1/10W	RM73B--474J	
R121~132	247 0015 966	Chip Carbon 2.7Mohm 1/10W	RM73B--275J	
R133~144	247 0006 962	Chip Carbon 470ohm 1/10W	RM73B--471J	
R145,146	247 0014 925	Chip Carbon 680kohm 1/10W	RM73B--684J	
R147,148	247 0009 985	Chip Carbon 10kohm 1/10W	RM73B--103J	
R149,150	247 0009 927	Chip Carbon 5.6kohm 1/10W	RM73B--562J	
R151,152	247 0006 962	Chip Carbon 470ohm 1/10W	RM73B--471J	
R153,154	247 0011 973	Chip Carbon 62kohm 1/10W	RM73B--623J	
R155,156	247 0013 984	Chip Carbon 470kohm 1/10W	RM73B--474J	
R157~160	247 0005 905	Chip Carbon 100ohm 1/10W	RM73B--101J	
R161~164	247 0004 922	Chip Carbon 47ohm 1/10W	RM73B--470J	
R165,166	247 0009 985	Chip Carbon 10kohm 1/10W	RM73B--103J	
R167~170	247 0009 901	Chip Carbon 4.7kohm 1/10W	RM73B--472J	
R171~174	247 0005 905	Chip Carbon 100ohm 1/10W	RM73B--101J	
R175,176	247 0009 985	Chip Carbon 10kohm 1/10W	RM73B--103J	
R177	247 0005 989	Chip Carbon 220ohm 1/10W	RM73B--221J	
R178	247 0014 967	Chip Carbon 1 Mohm 1/10W	RM73B--105J	
R179~182	247 0009 985	Chip Carbon 10kohm 1/10W	RM73B--103J	
R183,184	247 0009 927	Chip Carbon 5.6kohm 1/10W	RM73B--562J	
R185,186	247 0009 985	Chip Carbon 10kohm 1/10W	RM73B--103J	
R187	247 0009 927	Chip Carbon 5.6kohm 1/10W	RM73B--562J	
R188	247 0014 967	Chip Carbon 1 Mohm 1/10W	RM73B--105J	
R189	247 0009 927	Chip Carbon 5.6kohm 1/10W	RM73B--562J	
R190,191	247 0009 943	Chip Carbon 6.8kohm 1/10W	RM73B--682J	
R192	247 0009 943	Chip Carbon 6.8kohm 1/10W	RM73B--682J	
R194,195	247 0009 930	Chip Carbon 6.2kohm 1/10W	RM73B--622J	
R196,197	247 0009 943	Chip Carbon 6.8kohm 1/10W	RM73B--682J	
R198	247 0009 943	Chip Carbon 6.8kohm 1/10W	RM73B--682J	
R199	247 0005 905	Chip Carbon 100ohm 1/10W	RM73B--101J	
R201,202	247 0009 943	Chip Carbon 6.8kohm 1/10W	RM73B--682J	
R203,204	247 0005 905	Chip Carbon 100ohm 1/10W	RM73B--101J	
R205,206	247 0007 945	Chip Carbon 1kohm 1/10W	RM73B--102J	
R207~210	247 0009 985	Chip Carbon 10kohm 1/10W	RM73B--103J	
R211,212	247 0005 905	Chip Carbon 100ohm 1/10W	RM73B--101J	
R213,214	247 0007 945	Chip Carbon 1kohm 1/10W	RM73B--102J	
R215,216	247 0008 960	Chip Carbon 3.3kohm 1/10W	RM73B--332J	
R217~222	247 0009 985	Chip Carbon 10kohm 1/10W	RM73B--103J	
R223,224	247 0005 905	Chip Carbon 100ohm 1/10W	RM73B--101J	
R225,226	247 0011 944	Chip Carbon 47kohm 1/10W	RM73B--473J	
R227,228	247 0005 905	Chip Carbon 100ohm 1/10W	RM73B--101J	
R229,230	247 0011 944	Chip Carbon 47kohm 1/10W	RM73B--473J	
R231~236	247 0009 985	Chip Carbon 10kohm 1/10W	RM73B--103J	
R237,238	247 0005 905	Chip Carbon 100ohm 1/10W	RM73B--101J	
R251	247 0012 927	Chip Carbon 100kohm 1/10W	RM73B--104J	
R252	247 0013 900	Chip Carbon 220kohm 1/10W	RM73B--224J	
R253	247 0008 960	Chip Carbon 3.3kohm 1/10W	RM73B--332J	
R254	247 0007 945	Chip Carbon 1kohm 1/10W	RM73B--102J	
R255	247 0005 905	Chip Carbon 100ohm 1/10W	RM73B--101J	
R267,268	247 0009 985	Chip Carbon 10kohm 1/10W	RM73B--103J	
R269	247 0013 984	Chip Carbon 470kohm 1/10W	RM73B--474J	
R270	247 0005 905	Chip Carbon 100ohm 1/10W	RM73B--101J	
R271	247 0009 927	Chip Carbon 5.6kohm 1/10W	RM73B--562J	
R272	247 0007 945	Chip Carbon 1kohm 1/10W	RM73B--102J	
R273	247 0005 905	Chip Carbon 100ohm 1/10W	RM73B--101J	
R275,276	247 0013 984	Chip Carbon 470kohm 1/10W	RM73B--474J	
R277,278	247 0005 905	Chip Carbon 100ohm 1/10W	RM73B--101J	
R279,280	247 0009 969	Chip Carbon 8.2kohm 1/10W	RM73B--822J	
R281,282	247 0007 945	Chip Carbon 1kohm 1/10W	RM73B--102J	
R283,284	247 0005 905	Chip Carbon 100ohm 1/10W	RM73B--101J	
R295,296	247 0006 962	Chip Carbon 470ohm 1/10W	RM73B--471J	
R297,298	247 0015 966	Chip Carbon 2.7Mohm 1/10W	RM73B--275J	
VR251	211 0637 002	Variable Resister100kohm		
CAPACITORS GROUP				
C101,102	257 0005 944	Chip Ceramic 220pF/50V	CC73SL1H221J	
C103,104	254 4254 909	Electrolytic 10μF/16V	CE04W1C100M	
C105,106	257 0004 961	Chip Ceramic 100pF/50V	CC73SL1H101J	
C107,108	254 4254 925	Electrolytic 33μF/16V	CE04W1C330M	
C109,110	255 1264 995	Plastic Film 0.0056μF/50V	CQ93M1H562J(B)	
C111,112	257 0009 908	Chip Ceramic 1500pF/50V	CK73B1H152K	
C113,114	257 0012 982	Chip Ceramic 0.022μF/50V	CK73F1H223Z	
C115,116	254 4260 951	Electrolytic 2.2μF/50V	CE04W1H2R2M	
C133~135	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M	
C136~138	257 0012 982	Chip Ceramic 0.022μF/50V	CK73F1H223Z	
C139	257 0009 924	Chip Ceramic 2200pF/50V	CK73B1H222K	
C140,141	257 0012 966	Chip Ceramic 0.01μF/50V	CK73F1H103Z	
C142~144	257 0012 982	Chip Ceramic 0.022μF/50V	CK73F1H223Z	
C145,146	254 4261 918	Electrolytic 47μF/50V	CE04W1H470M	
C151,152	254 4254 909	Electrolytic 10μF/16V	CE04W1C100M	
C153,154	257 0004 961	Chip Ceramic 100pF/50V	CC73SL1H101J	
C157,158	254 4260 951	Electrolytic 2.2μF/50V	CE04W1H2R2M	
C159,160	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M	
C161	254 4254 941	Electrolytic 100μF/16V	CE04W1C101M	
C162	257 0012 966	Chip Ceramic 0.01μF/50V	CK73F1H103Z	
C163	254 4252 930	Electrolytic 100μF/10V	CE04W1A101M	
C164	257 0012 966	Chip Ceramic 0.01μF/50V	CK73F1H103Z	
C164	257 0006 927	Chip Ceramic 470pF/50V	CC73SL1H471J	
C165	254 4254 938	Electrolytic 47μF/16V	CE04W1C470M	
C166	257 0006 927	Chip Ceramic 470pF/50V	CC73SL1H471J	
C167	254 4254 909	Electrolytic 10μF/16V	CE04W1C100M	
C168	257 0012 966	Chip Ceramic 0.01μF/50V	CK73F1H103Z	
C169,170	255 1264 966	Plastic Film 0.0033μF/50V	CQ93M1H332J(B)	
C171	254 4250 932	Electrolytic 220μF/6.3V	CE04W0J221M	
C172	257 0014 935	Chip Ceramic 0.1μF/25V	CK73F1E104Z	
C173	257 0008 983	Chip Ceramic 1000pF/50V	CK73B1H102K	
C175,176	254 4254 909	Electrolytic 10μF/16V	CE04W1C100M	
C177,178	257 0004 961	Chip Ceramic 100pF/50V	CC73SL1H101J	
C179,180	254 4258 905	Electrolytic 4.7μF/35V	CE04W1V4R7M	
C181	254 4254 909	Electrolytic 10μF/16V	CE04W1C100M	
C182	257 0004 961	Chip Ceramic 100pF/50V	CC73SL1H101J	
C183	254 4258 905	Electrolytic 4.7μF/35V	CE04W1V4R7M	
C184	256 1035 936	Metalized 0.33μF/50V	CF93A1H334J	
C185,186	257 0004 961	Chip Ceramic 100pF/50V	CC73SL1H101J	
C187,188	254 4254 909	Electrolytic 10μF/16V	CE04W1C100M	
C189	257 0004 961	Chip Ceramic 100pF/50V	CC73SL1H101J	
C191~194	257 0004 961	Chip Ceramic 100pF/50V	CC73SL1H101J	
C196	257 0004 961	Chip Ceramic 100pF/50V	CC73SL1H101J	
C198	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M	
C203,204	253 1126 901	Ceramic 150pF/500V	CK45B2H151K	
C205,206	257 0009 908	Chip Ceramic 1500pF/50V	CK73B1H152K	
C207,208	257 0005 944	Chip Ceramic 220pF/50V	CC73SL1H221J	
C209,210	257 0009 953	Chip Ceramic 3900pF/50V	CK73B1H392K	
C211,212	254 4260 906	Electrolytic 0.1μF/50V	CE04W1H0R1M	
C215,216	253 4488 905	Ceramic 56pF/500V	CC45SL2H560J	
C217,218	254 4260 906	Electrolytic 0.1μF/50V	CE04W1H0R1M	
C219,220	257 0009 908	Chip Ceramic 1500pF/50V	CK73B1H152K	
C221,222	257 0005 944	Chip Ceramic 220pF/50V	CC73SL1H221J	
C223,224	257 0009 953	Chip Ceramic 3900pF/50V	CK73B1H392K	
C229,230	253 1100 901	Ceramic 100pF/50V	CK45B1H101K	
C231,232	253 1112 902	Ceramic 1000pF/50V	CK45B1H102K	
C233,234	253 9039 003	BC Ceramic 0.1μF/25V	CK45=1E104Z	
C251,252	257 0012 982	Chip Ceramic 0.022μF/50V	CK73F1H223Z	
C253,254	254 4254 909	Electrolytic 10μF/16V	CE04W1C100M	
C255	257 0004 961	Chip Ceramic 100pF/50V	CC73SL1H101J	
C256	254 4254 909	Electrolytic 10μF/16V	CE04W1C100M	
C269	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M	
C270	257 0012 966	Chip Ceramic 0.01μF/50V	CK73F1H103Z	
C271	254 3056 917	Electrolytic 1μF/50V (Bipole)	CE04D1H010MBP	
C272	257 0012 966	Chip Ceramic 0.01μF/50V	CK73F1H103Z	
C273	254 4254 909	Electrolytic 10μF/16V	CE04W1C100M	
C275,276	254 4254 909	Electrolytic 10μF/16V	CE04W1C100M	
C277~279	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M	
OTHER GROUP				**Q'ty**
	—	(P.W.Board)		1
L101	235 0060 989	Inductor 120 μH		1
LF103,104	232 0168 002	LC Filter		2
XL101	399 0209 905	Ceramic Resonator	CST11.2MTW040	1
	204 8313 003	4P Pin Jack(S-GND)		2
	204 8346 009	6P Pin Jack(S-GND)		1
	205 0274 004	2P Connector Base		1
	205 0343 032	3P Conn. Base(KR-PH)		2
CN6A	205 0748 064	JL Connector(R)		1

Ref. No.	Part No.	Part Name	Remarks	Q'ty
CN8C	205 0536 001	8P Conn. Socket		1
CN7B	205 0343 074	7P Conn. Base(KR-PH)		2
CN10A	205 0536 056	10P Conn. Socket		1
CN13A	205 0708 004	13P Conn. Socket		1
	203 0426 005	1P Conn. Cord Ass'y		1
	414 0695 009	Shield Plate		1

BLOCK DIAGRAM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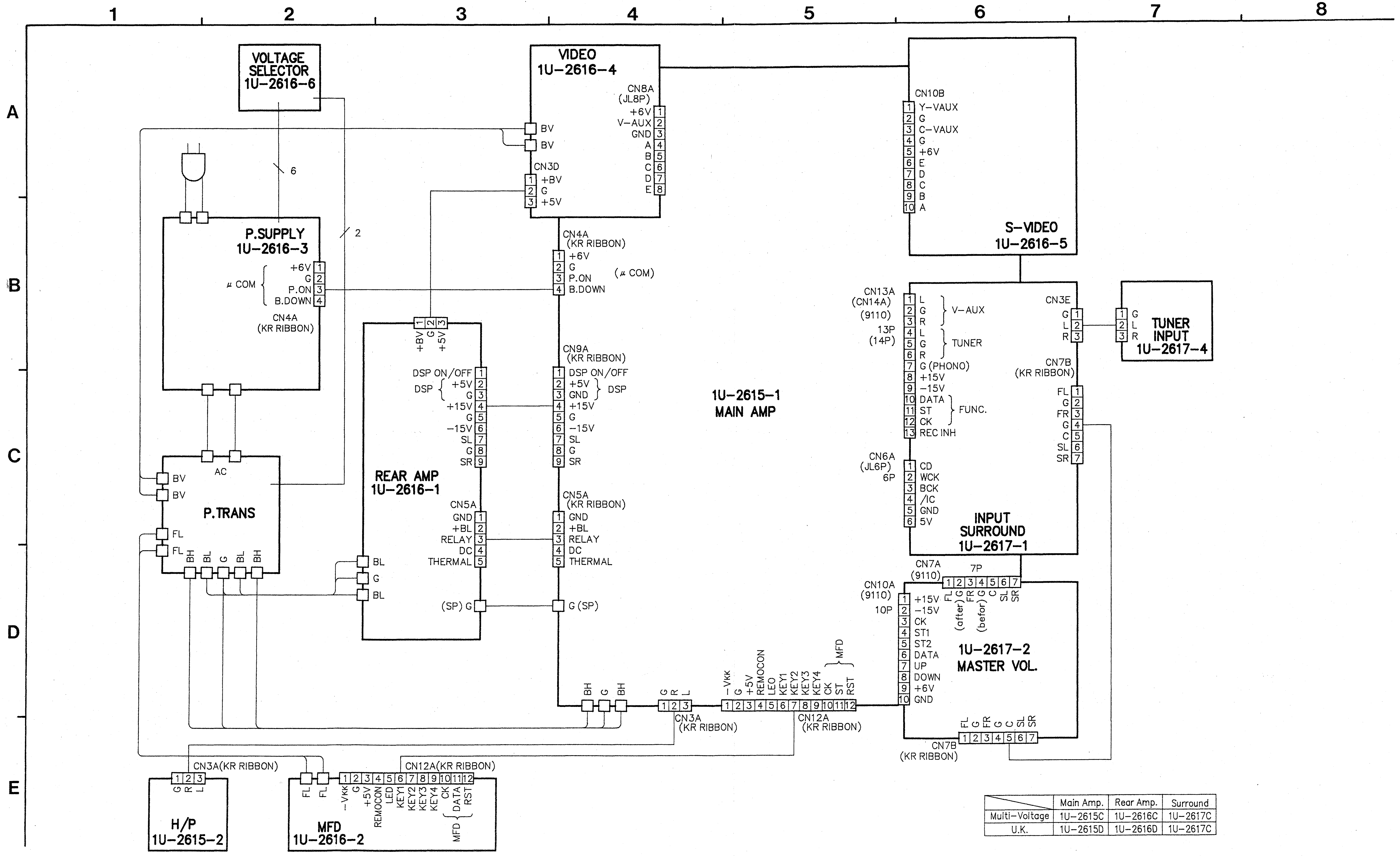
A
B
C
D
E
BA7625
VDP
VCR
A-AUX
MONITOR
VCR
A
B
C
D
E
S-VIDEO INPUT
VDP/DBS
VCR
V.AUX
MONITOR OUT
VCR REC OUT
FL DRIVER
CK
DATA
RESET
REM
POWER
BRAKE DOWN
PROTECT
KEY1
KEY4
LED
μ-COM
BM
BH
BL
BL
BH
VIDEO
FILAM
V-AUX
PHONO
CD
VDP
VCR
LC7822 (1/2)
LC7822 (2/2)
TAPE
LC4966
VCR REC
TAPE REC
REC INH
CK
DATA
ST
TUNER
0dB
L
R
0dB
LC7823 (1/4)
-1.5dB
ATT
-1.5dB
ATT
CK
DATA
ST
0dB
0dB
F71002B
L
C
R
FL
FR
SL
SR
ST
CK
DATA
IC
DSP OFF
PSRAM
HM
0dB
HPF
0dB
0dB
-3.5dB
LC7823(4/4)
0dB
0dB
0dB
0dB
0dB
0dB
+12dB
0dB
+12dB
0dB
LC7823(3/4)
+1.5dB
+1.5dB
LC7823(2/4)
TC9176
+12dB
CK
DATA
ST
BALANCE
TONE
M
UP
DOWN
+16.5dB
+27.5dB
+16.5dB
+27.5dB
+18dB
+27.5dB
+19dB
+26.5dB
+19dB
+26.5dB
PRE MUTE
FRONT
CENTER
REAR
FRONT LCH SP
FRONT RCH SP
MONO OUT
PRE MUTE
CENTER PRE OUT
CENTER SP
REAR LCH SP
REAR RCH SP

WIRING DIAGRAM


1
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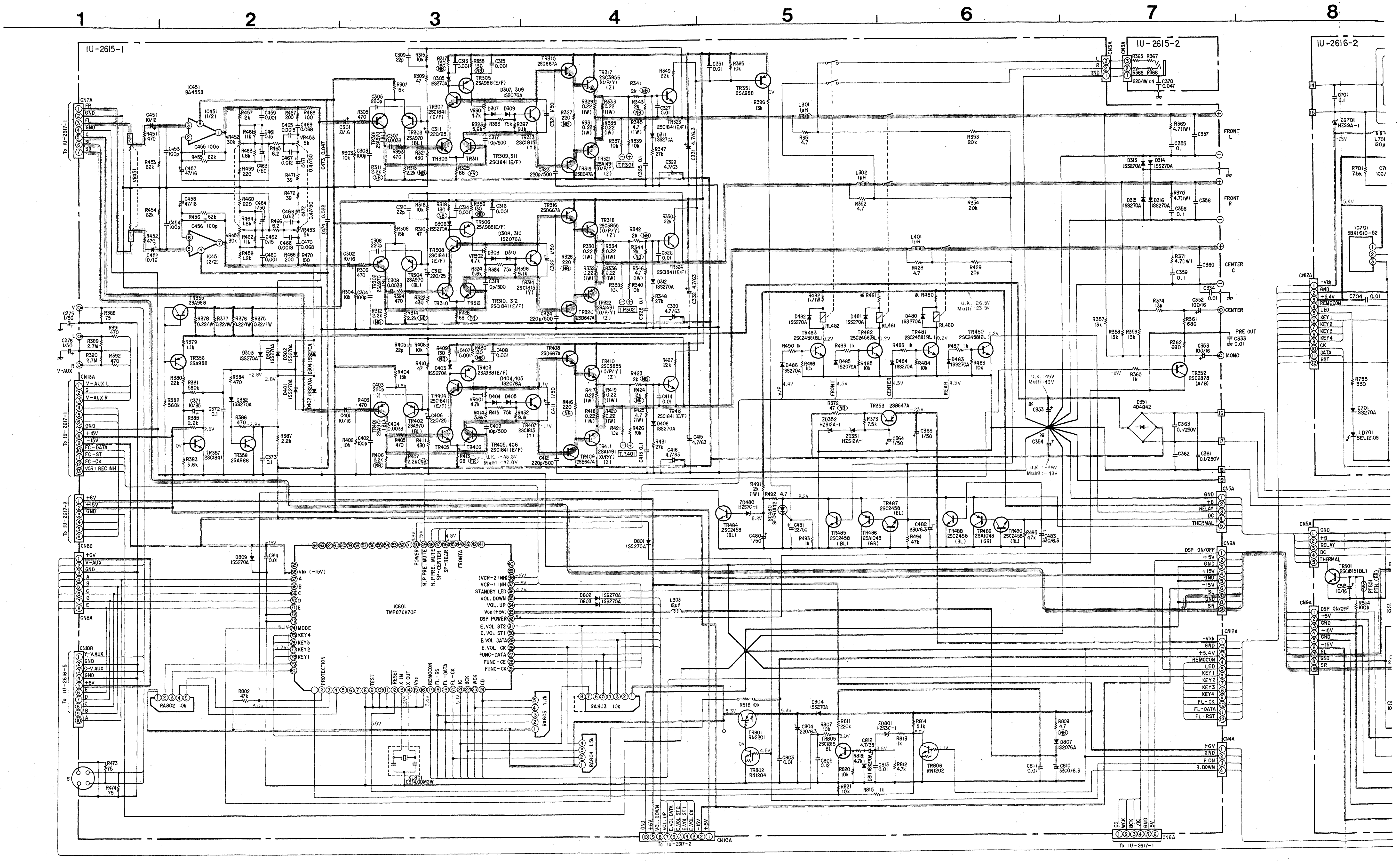
A
B
C
D
E
VOLTAGE SELECTOR 1U-2616-6
6
2
P.SUPPLY 1U-2616-3
μ COM
+6V 1
G 2
P.ON 3
B.DOWN 4
CN4A (KR RIBBON)
VIDEO 1U-2616-4
CN8A (JL8P)
+6V 1
V-AUX 2
GND 3
A 4
B 5
C 6
D 7
E 8
BV
BV
CN3D
1 +BV
2 G
3 +5V
CN4A (KR RIBBON)
1 +6V
2 G
3 P.ON
4 B.DOWN
(μ COM)
CN9A (KR RIBBON)
1 DSP ON/OFF
2 +5V
3 GND
DSP
4 +15V
5 G
6 −15V
7 SL
8 G
9 SR
CN5A (KR RIBBON)
1 GND
2 +BL
3 RELAY
4 DC
5 THERMAL
G (SP)
REAR AMP 1U-2616-1
+BV 1
G 2
+5V 3
DSP ON/OFF 1
DSP
+5V 2
G 3
+15V 4
G 5
−15V 6
SL 7
G 8
SR 9
CN5A
GND 1
+BL 2
RELAY 3
DC 4
THERMAL 5
BL
G
BL
(SP) G
P.TRANS
AC
BV
BV
FL
FL
BH
BL
G
BL
BH
1U-2615-1 MAIN AMP
S-VIDEO 1U-2616-5
CN10B
1 Y-VAUX
2 G
3 C-VAUX
4 G
5 +6V
6 E
7 D
8 C
9 B
10 A
INPUT SURROUND 1U-2617-1
CN13A (CN14A) (9110) 13P (14P)
1 L
2 G
3 R
V-AUX
4 L
5 G
6 R
TUNER
7 G (PHONO)
8 +15V
9 −15V
10 DATA
11 ST
12 CK
FUNC.
13 REC INH
CN6A (JL6P) 6P
1 CD
2 WCK
3 BCK
4 /IC
5 GND
6 5V
CN3E
G 1
L 2
R 3
CN7B (KR RIBBON)
FL 1
G 2
FR 3
G 4
C 5
SL 6
SR 7
TUNER INPUT 1U-2617-4
1 G
2 L
3 R
1U-2617-2 MASTER VOL.
CN7A (9110) 7P
1 FL
2 G
3 FR
4 G
5 C
6 SL
7 SR
(after)
(befor)
CN10A (9110) 10P
1 +15V
2 −15V
3 CK
4 ST1
5 ST2
6 DATA
7 UP
8 DOWN
9 +6V
10 GND
CN7B (KR RIBBON)
FL G FR G C SL SR
1 2 3 4 5 6 7
BH G BH
G R L
1 2 3
CN3A (KR RIBBON)
−VKK G +5V REMOCON LED KEY1 KEY2 KEY3 KEY4 CK ST RST
MFD
1 2 3 4 5 6 7 8 9 10 11 12
CN12A (KR RIBBON)
CN3A(KR RIBBON)
1 2 3
G R L
H/P 1U-2615-2
CN12A(KR RIBBON)
FL FL
1 2 3 4 5 6 7 8 9 10 11 12
−VKK G +5V REMOCON LED KEY1 KEY2 KEY3 KEY4 CK DATA RST
MFD
MFD 1U-2616-2

	Main Amp.	Rear Amp.	Surround
Multi-Voltage	1U-2615C	1U-2616C	1U-2617C
U.K.	1U-2615D	1U-2616D	1U-2617C

SCHEMATIC DIAGRAM-1/3


1
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3
4
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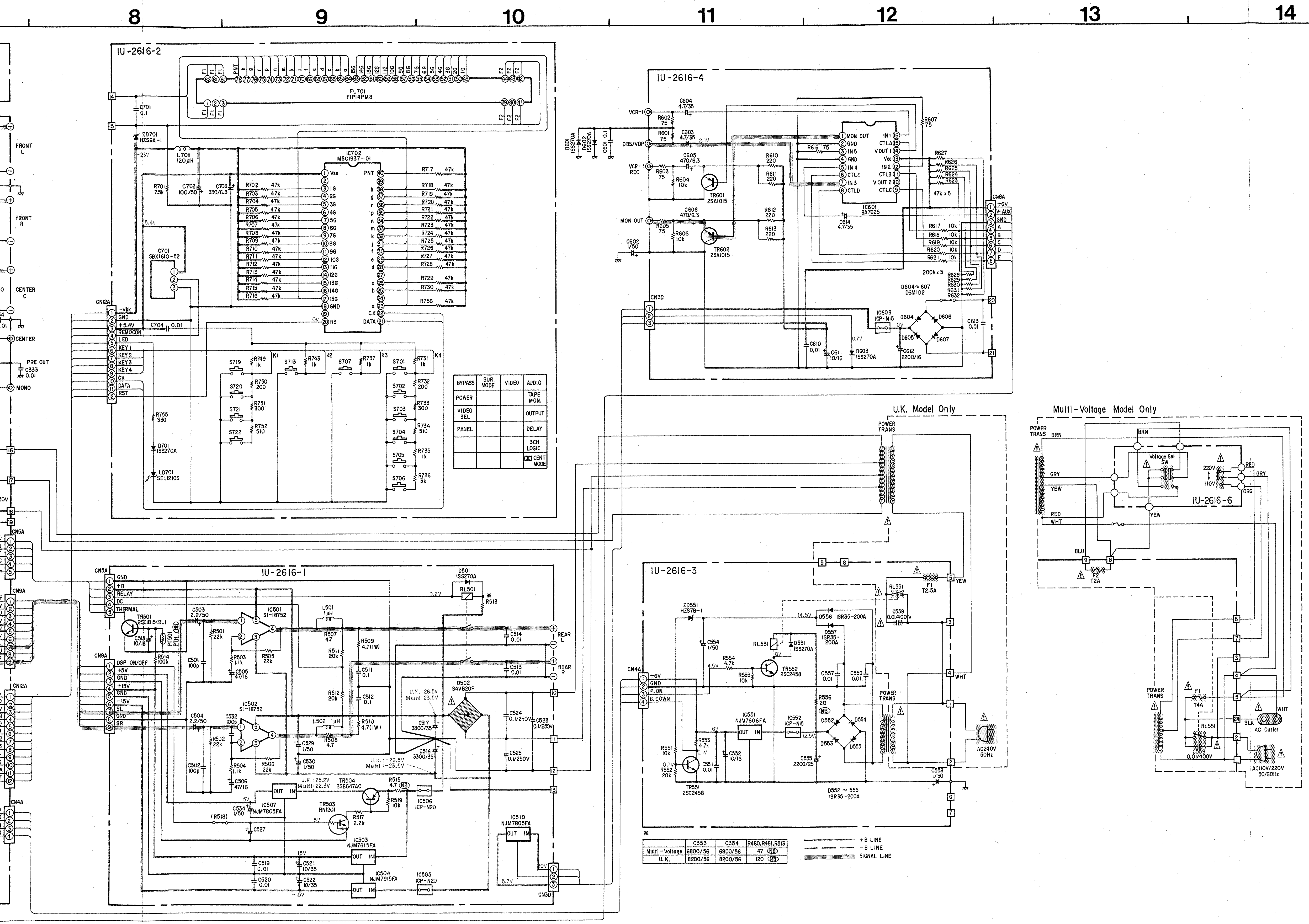
6
7
8
IU-2615-1
IU-2615-2
IU-2616-2
CN7A
FR
GND
FL
GND
C
SL
SR
To IU-2617-1
IC451
BA4558
IC451 (1/2)
IC451 (2/2)
VR451
VR452
VR453
TR301
TR302
TR303
TR304
TR305 2SA988(E/F)
TR306 2SA988(E/F)
TR307 2SC1841 (E/F)
TR308 2SC1841 (E/F)
TR309, 311 2SC1841 (E/F)
TR310, 312 2SC1841 (E/F)
TR313 2SC1815 (Y)
TR314 2SC1815 (Y)
TR315 2SD667A
TR316 2SD667A
TR317 2SC3855 (O/P/Y) (Z)
TR318 2SC3855 (O/P/Y) (Z)
TR319 2SB647A
TR320 2SB647A
TR321 2SA1491 (O/P/Y) (Z)
TR322 2SA1491 (O/P/Y) (Z)
TR323 2SC1841 (E/F)
TR324 2SC1841 (E/F)
TR351 2SA988
TR352 2SC2878 (A/B)
TR353 2SB647A
TR355 2SA988
TR356 2SA988
TR357 2SC1841
TR358 2SA988
TR401
TR402 2SA970 (BL)
TR403 2SA988 (E/F)
TR404 2SC1841 (E/F)
TR405, 406 2SC1841 (E/F)
TR407 2SC1815 (Y)
TR408 2SD667A
TR409 2SB647A
TR410 2SC3855 (O/P/Y) (Z)
TR411 2SA1491 (O/P/Y) (Z)
TR412 2SC1841 (E/F)
D307, 309 1S2076A
D308, 310 1S2076A
D404, 405 1S2076A
T.P301
T.P302
T.P401
L301 1μH
L302 1μH
L401 1μH
FRONT L
FRONT R
CENTER C
CENTER
PRE OUT
MONO
V-AUX
CN13A
V-AUX L
G
V-AUX R
GND
+15V
-15V
FC-DATA
FC-ST
FC-CK
VCR1 REC INH
+6V
To IU-2617-3
CN6B
CN8A
CN10B
Y-V.AUX
C-V.AUX
To IU-2616-5
RL480
RL481
RL482
TR480 2SC2458(BL)
TR481 2SC2458(BL)
TR482 2SC2458(BL)
TR483 2SC2458(BL)
H/P
FRONT
CENTER
REAR
U.K.: 26.5V Multi: 23.5V
U.K.: 49V Multi: 43V
U.K.: -49V Multi: -43V
U.K.: -48.8V Multi: -42.8V
D351 404B42
TR484 2SC2458 (BL)
TR485 2SC2458 (BL)
TR486 2SA1048 (GR)
TR487 2SC2458 (BL)
TR488 2SC2458 (BL)
TR489 2SA1048 (GR)
TR490 2SC2458 (BL)
ZD480 HZ5C-1
SC480 SFOR1A42
IC801
TMP87CK70F
Vkk (-15V)
MODE
KEY4
KEY3
KEY2
KEY1
PROTECTION
TEST
RESET
X IN
X OUT
Vss
REMOCON
FL-RS
FL-DATA
FL-CK
WCK
BCK
CD
POWER
H.P PRE MUTE
H.P PRE MUTE
SP-CENTER
SP-REAR
FRONTA
VCR-2 INH
VCR-1 INH
STANDBY LED
VOL. DOWN
VOL. UP
VDD (+5V)
DSP POWER
E.VOL ST2
E.VOL ST1
E.VOL DATA
E.VOL CK
FUNC-DATA
FUNC-CE
FUNC-CK
RA802 10k
RA803 10k
RA804 1.5k
RA805 4.7k
L303 12μH
CX801 CST4.00MGW
D802 1SS270A
D803 1SS270A
D809 1SS270A
D801 1SS270A
D804 1SS270A
TR801 RN2201
TR802 RN1204
TR805 2SC1815 BL
TR806 RN1202
ZD801 HZ5C-1
D807 1S2076A
C810 3300/6.3
CN5A
GND
+B
RELAY
DC
THERMAL
CN9A
DSP ON/OFF
+5V
+15V
-15V
SL
SR
CN12A
-Vkk
+5.4V
REMOCON
LED
KEY1
KEY2
KEY3
KEY4
FL-CK
FL-DATA
FL-RST
CN4A
P.ON
B.DOWN
CN10A
To IU-2617-2
CN6A
To IU-2617-1
CN3A
ZD701 HZS9A-1
IC701 SBX1610-52
LD701 SEL2110S
TR501 2SC1815(BL)
PT501 PTH
L701 120μ
CK
DATA
RST


8
9
10
11
12
13
14
15
A
B
C
D
E
IU-2616-2
FL701
FIP14PM8
IC702
MSC1937-01
IC701
SBX1610-52
IU-2616-4
IC601
BA7625
TR601
2SA1015
TR602
2SA1015
CN8A
CN30
IC603
ICP-N15
D604~607
DSM1D2
U.K. Model Only
Multi-Voltage Model Only
POWER TRANS
IU-2616-6
Voltage Sel SW
IU-2616-1
IC501
SI-18752
IC502
SI-18752
D502
S4V820F
RL501
TR501
2SC1815(BL)
IC507
NJM7805FA
IC503
NJM7815FA
IC504
NJM7915FA
IC510
NJM7805FA
REAR L
REAR R
IU-2616-3
IC551
NJM7806FA
TR552
2SC2458
TR551
2SC2458
D552 ~ 555
ISR35-200A
AC240V 50Hz
AC110V/220V 50/60Hz
AC Outlet
FRONT L
FRONT R
CENTER C
PRE OUT
MONO
BYPASS
SUR. MODE
VIDEO
AUDIO
POWER
TAPE MON.
VIDEO SEL
OUTPUT
PANEL
DELAY
3CH LOGIC
CENT MODE
+B LINE
-B LINE
SIGNAL LINE

※

	C353	C354	R480,R481,R513
Multi-Voltage	6800/56	6800/56	47 (NB)
U.K.	8200/56	8200/56	120 (NB)

NOTES
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ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD

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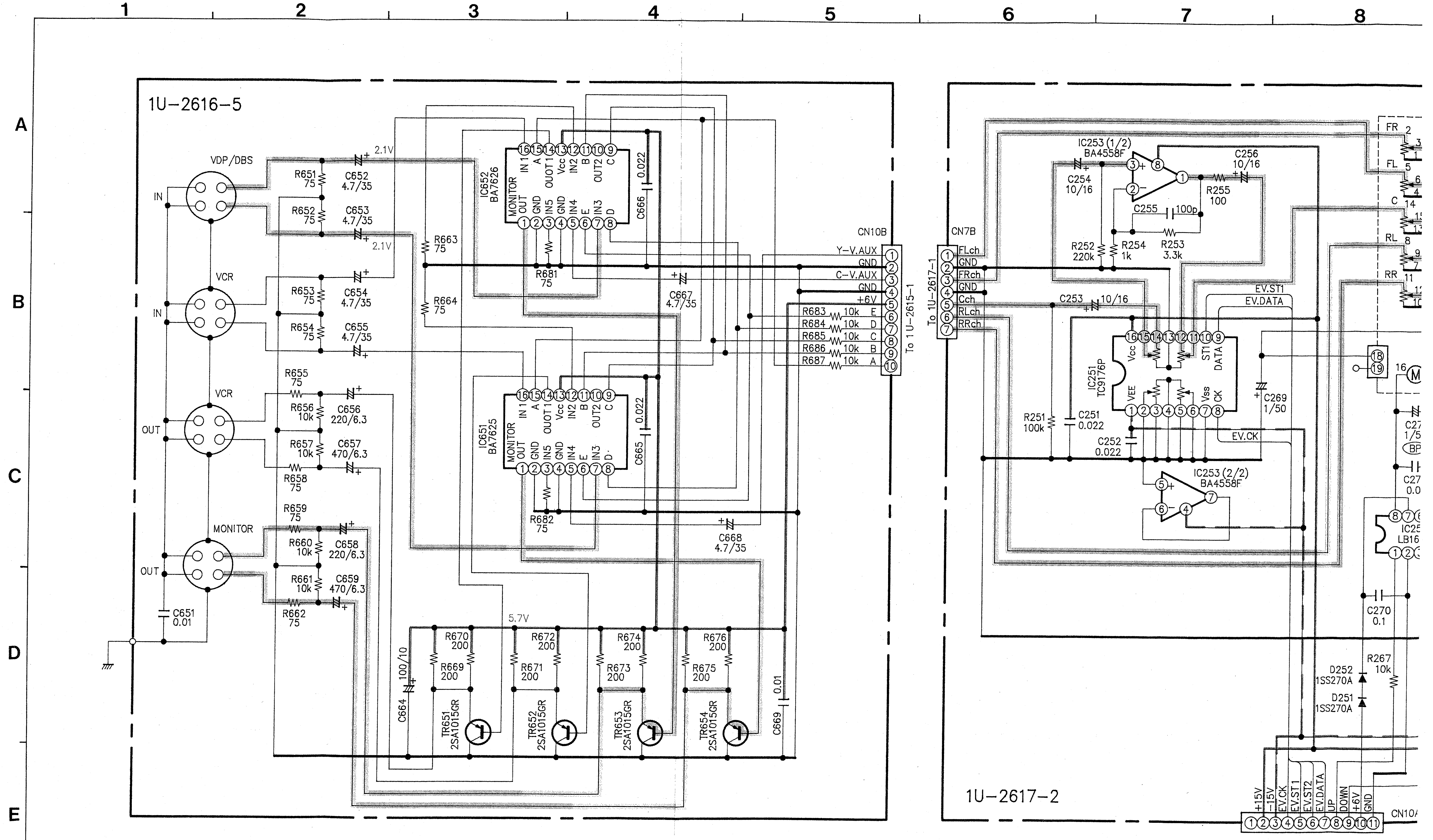
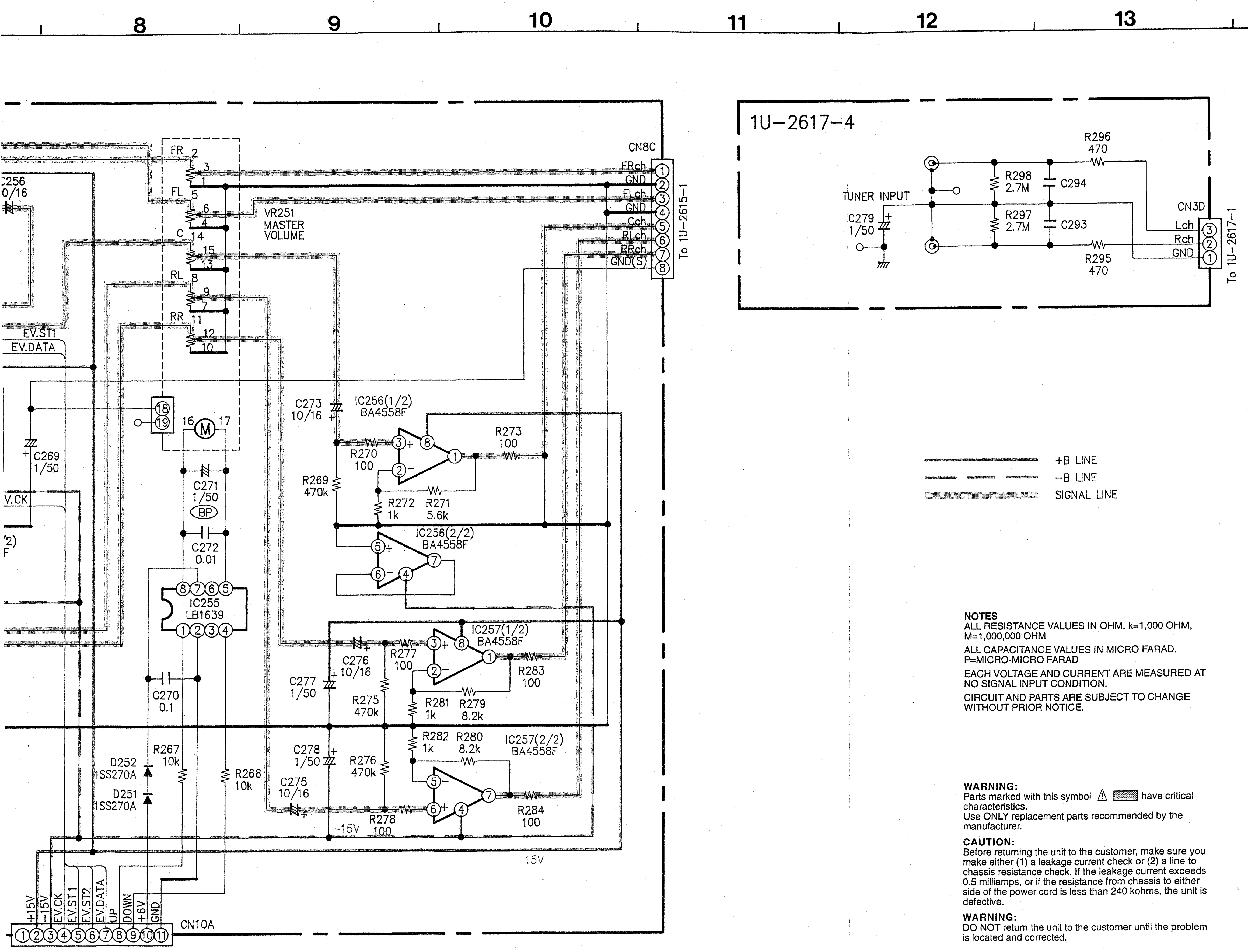
SCHEMATIC DIAGRAM-2/3


1
2
3
4
5
6
7
8
A
B
C
D
E
1U-2616-5
VDP/DBS
IN
VCR
IN
VCR
OUT
MONITOR
OUT
C651
0.01
R651
75
C652
4.7/35
2.1V
R652
75
C653
4.7/35
2.1V
R653
75
C654
4.7/35
R654
75
C655
4.7/35
R655
75
R656
10k
C656
220/6.3
R657
10k
C657
470/6.3
R658
75
R659
75
R660
10k
C658
220/6.3
R661
10k
C659
470/6.3
R662
75
R663
75
R664
75
IC652
BA7626
IC651
BA7625
16 15 14 13 12 11 10 9
IN 1
A
OUOT 1
Vcc
IN2
B
OUT2
C
MONITOR OUT
GND
IN5
GND
IN4
E
IN3
D
1 2 3 4 5 6 7 8
0.022
C666
C665
R681
75
R682
75
C667
4.7/35
C668
4.7/35
CN10B
Y-V.AUX
GND
C-V.AUX
GND
+6V
R683 10k E
R684 10k D
R685 10k C
R686 10k B
R687 10k A
1 2 3 4 5 6 7 8 9 10
To 1U-2615-1
5.7V
R670
200
R669
200
R672
200
R671
200
R674
200
R673
200
R676
200
R675
200
C664
100/10
TR651
2SA1015GR
TR652
2SA1015GR
TR653
2SA1015GR
TR654
2SA1015GR
C669
0.01
To 1U-2617-1
CN7B
FLch
GND
FRch
GND
Cch
RLch
RRch
1 2 3 4 5 6 7
IC253 (1/2)
BA4558F
C254
10/16
C256
10/16
R255
100
C255
100p
R252
220k
R254
1k
R253
3.3k
EV.ST1
EV.DATA
C253
10/16
IC251
TC9176P
Vcc
ST1
DATA
VEE
Vss
CK
16 15 14 13 12 11 10 9
1 2 3 4 5 6 7 8
R251
100k
C251
0.022
C252
0.022
EV.CK
C269
1/50
IC253 (2/2)
BA4558F
FR
FL
C
RL
RR
18
19
16
C270
0.1
R267
10k
D252
1SS270A
D251
1SS270A
1U-2617-2
+15V
-15V
EV.CK
EV.ST1
EV.ST2
EV.DATA
UP
DOWN
+6V
GND
1 2 3 4 5 6 7 8 9 10 11
CN10A


8
9
10
11
12
13
14
15
CN8C
FRch
GND
FLch
GND
Cch
RLch
RRch
GND(S)
To 1U-2615-1
FR
FL
C
RL
RR
VR251
MASTER
VOLUME
C256
10/16
EV.ST1
EV.DATA
C269
1/50
V.CK
16
M
17
C271
1/50
BP
C272
0.01
IC255
LB1639
C270
0.1
D252
1SS270A
D251
1SS270A
R267
10k
R268
10k
C273
10/16
IC256(1/2)
BA4558F
R270
100
R269
470k
R272
1k
R271
5.6k
R273
100
IC256(2/2)
BA4558F
IC257(1/2)
BA4558F
C276
10/16
R277
100
C277
1/50
R275
470k
R281
1k
R279
8.2k
R283
100
R282
1k
R280
8.2k
IC257(2/2)
BA4558F
C278
1/50
R276
470k
C275
10/16
R278
100
R284
100
-15V
15V
+15V
-15V
EV.CK
EV.ST1
EV.ST2
EV.DATA
UP
DOWN
+6V
GND
CN10A
1U-2617-4
TUNER INPUT
C279
1/50
R298
2.7M
R297
2.7M
C294
C293
R296
470
R295
470
CN3D
Lch
Rch
GND
To 1U-2617-1

━━━━ +B LINE

━━ ━━ ━━ -B LINE

▨▨▨▨ SIGNAL LINE

NOTES

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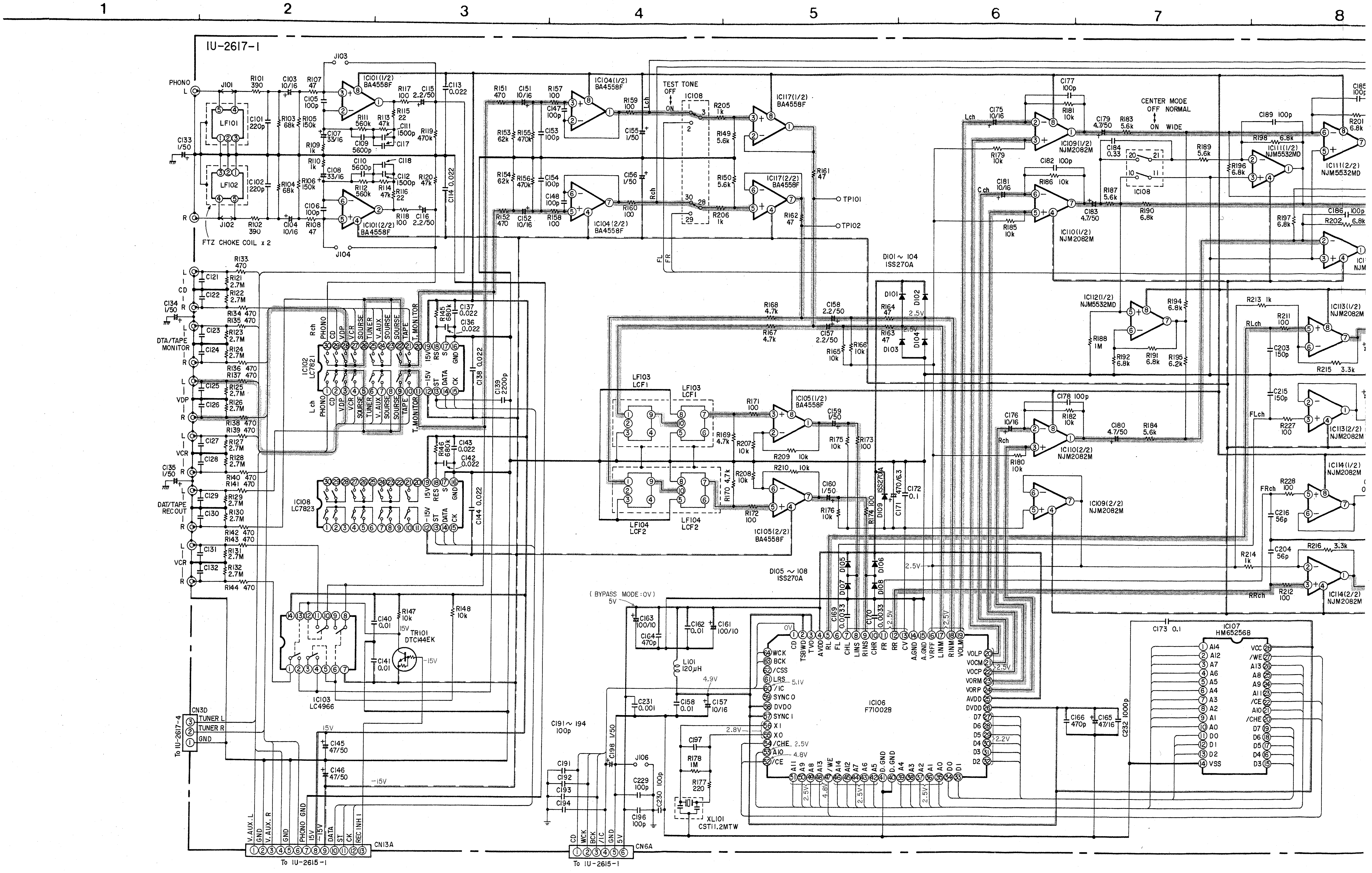
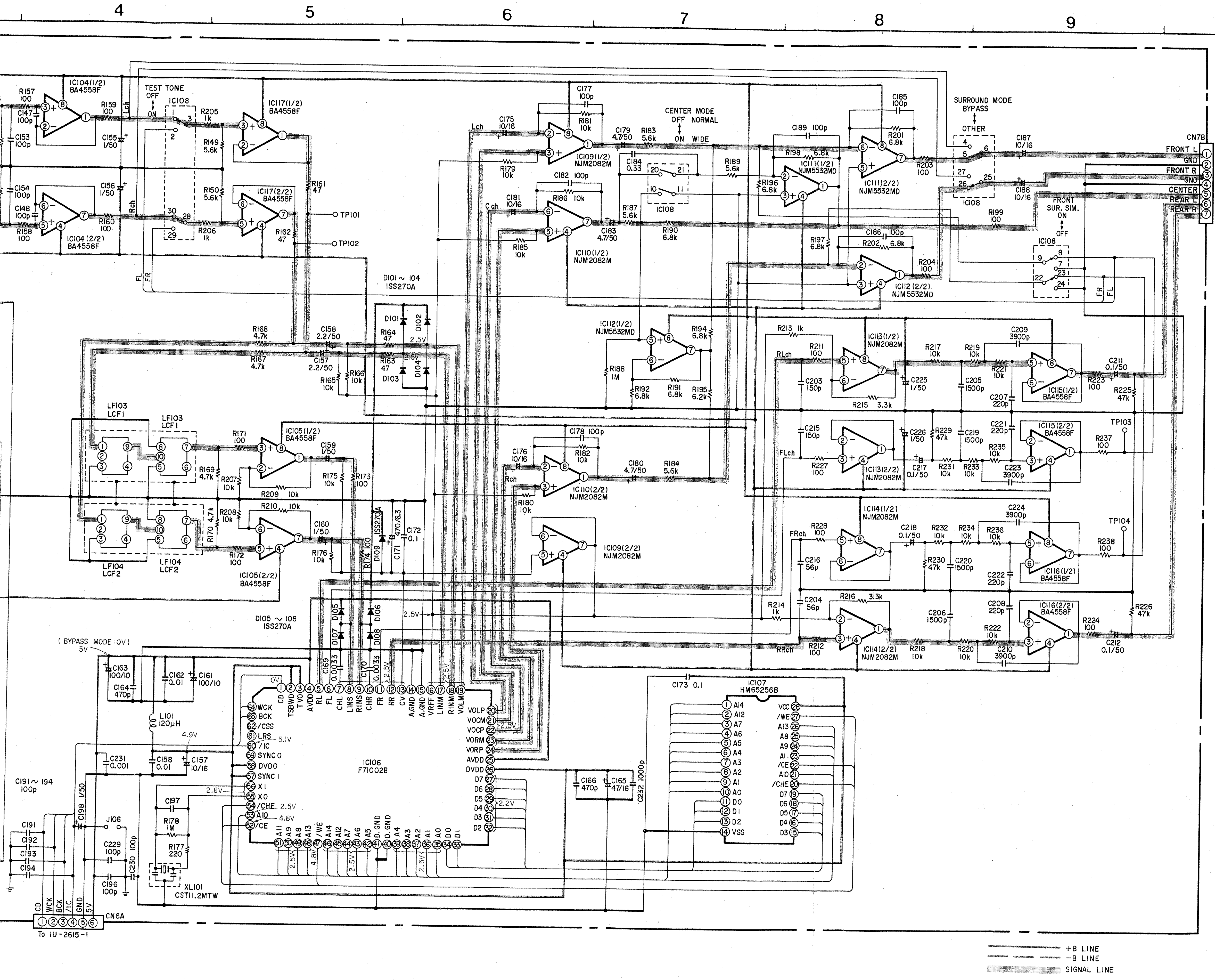
SCHEMATIC DIAGRAM-3/3


1
2
3
4
5
6
7
8
IU-2617-1
PHONO
L
R
J101
J102
J103
J104
LF101
LF102
FTZ CHOKE COIL x 2
IC101(1/2) BA4558F
IC101(2/2) BA4558F
IC104(1/2) BA4558F
IC104(2/2) BA4558F
TEST TONE
OFF
ON
IC108
IC117(1/2) BA4558F
IC117(2/2) BA4558F
TP101
TP102
Lch
Rch
FL
FR
D101 ~ 104 ISS270A
D105 ~ 108 ISS270A
CENTER MODE
OFF NORMAL
ON WIDE
IC109(1/2) NJM2082M
IC109(2/2) NJM2082M
IC110(1/2) NJM2082M
IC110(2/2) NJM2082M
IC111(1/2) NJM5532MD
IC111(2/2) NJM5532MD
IC112(1/2) NJM5532MD
IC113(1/2) NJM2082M
IC113(2/2) NJM2082M
IC114(1/2) NJM2082M
IC114(2/2) NJM2082M
RLch
FLch
FRch
RRch
CD
DTA/TAPE MONITOR
VDP
VCR
DAT/TAPE RECOUT
IC102 LC7821
IC108 LC7823
PHONO
CD
VDP
VCR
SOURSE
TUNER
V.AUX
TAPE
T.MONITOR
15V
-15V
RS
ST
DATA
CK
GND
LF103 LCF1
LF104 LCF2
IC105(1/2) BA4558F
IC105(2/2) BA4558F
IC103 LC4966
TR101 DTC144EK
(BYPASS MODE : 0V)
5V
L101 120μH
XL101 CST11.2MTW
IC106 F710028
IC107 HM65256B
CN3D
TUNER L
TUNER R
GND
To IU-2617-4
CN13A
V.AUX.L
GND
V.AUX.R
GND
PHONO GND
15V
-15V
DATA
ST
CK
REC INH 1
To IU-2615-1
CN6A
CD
WCK
BCK
/IC
GND
To IU-2615-1
C191 ~ 194 100p
J106
2.5V
2.2V
2.8V
4.9V
5.1V
4.8V
0V


4
5
6
7
8
9
TEST TONE
OFF
ON
IC108
IC104(1/2) BA4558F
IC104(2/2) BA4558F
IC117(1/2) BA4558F
IC117(2/2) BA4558F
TP101
TP102
CENTER MODE
OFF NORMAL
ON WIDE
IC109(1/2) NJM2082M
IC110(1/2) NJM2082M
IC111(1/2) NJM5532MD
IC111(2/2) NJM5532MD
IC112(2/2) NJM5532MD
IC112(1/2) NJM5532MD
SURROUND MODE
BYPASS
OTHER
FRONT SUR. SIM.
ON
OFF
CN7B
FRONT L
GND
FRONT R
GND
CENTER
REAR L
REAR R
To IU-2617-2
D101 ~ 104 ISS270A
LF103 LCF1
LF104 LCF2
IC105(1/2) BA4558F
IC105(2/2) BA4558F
IC110(2/2) NJM2082M
IC109(2/2) NJM2082M
IC113(1/2) NJM2082M
IC113(2/2) NJM2082M
IC114(1/2) NJM2082M
IC114(2/2) NJM2082M
IC115(1/2) BA4558F
IC115(2/2) BA4558F
IC116(1/2) BA4558F
IC116(2/2) BA4558F
TP103
TP104
RLch
FLch
FRch
RRch
D105 ~ 108 ISS270A
(BYPASS MODE : 0V)
5V
IC106 F71002B
IC107 HM65256B
L101 120μH
XL101 CSTI1.2MTW
C191 ~ 194 100p
J106
CN6A
To IU-2615-1
CD WCK BCK /IC GND 5V
2.5V
4.8V
4.9V
5.1V
2.8V
2.2V
+B LINE
-B LINE
SIGNAL LINE

NOTES

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM, M=1,000,000 OHM

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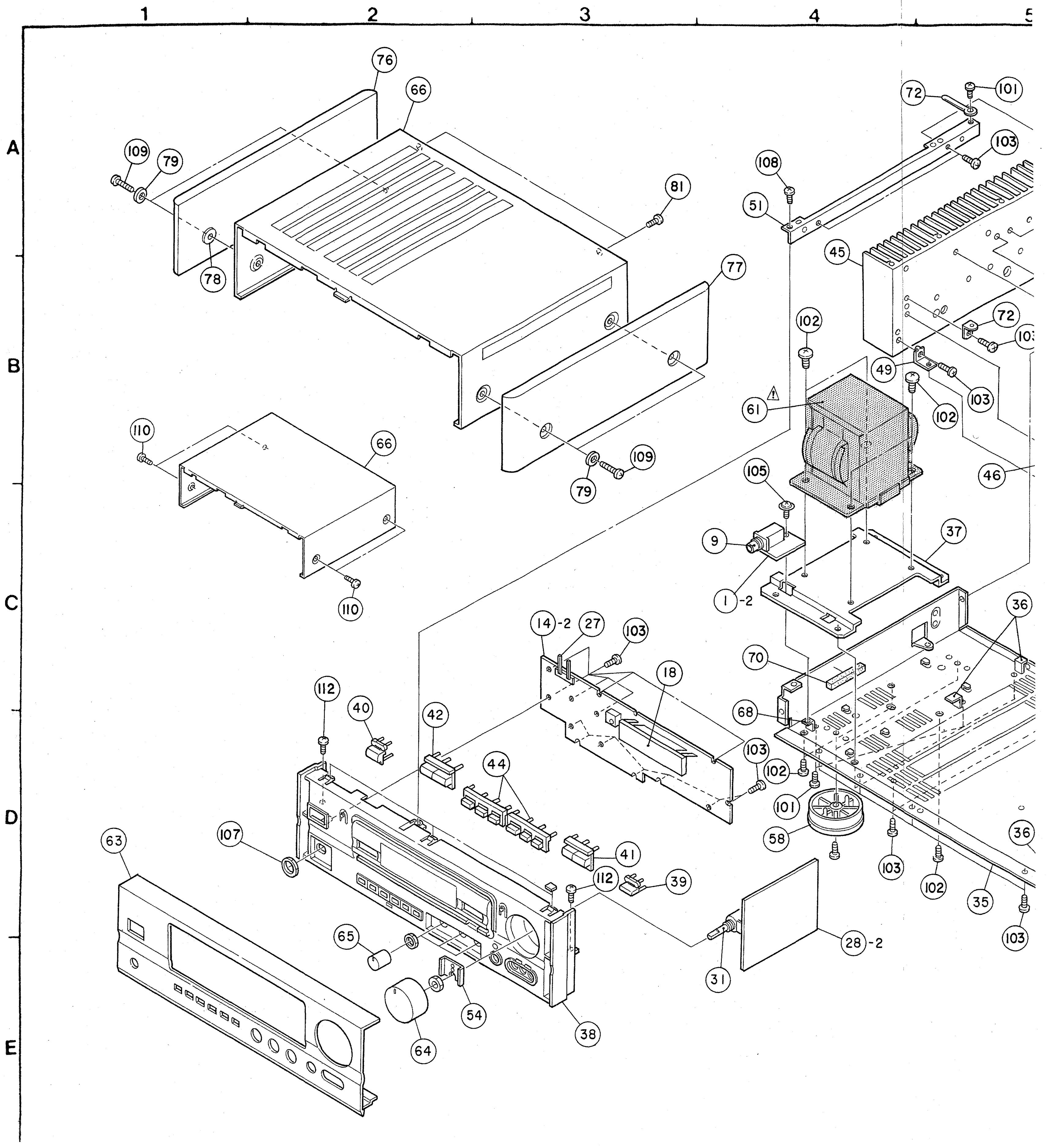
EXPLODED VIEW OF CHASSIS AND CABINET


1
2
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A
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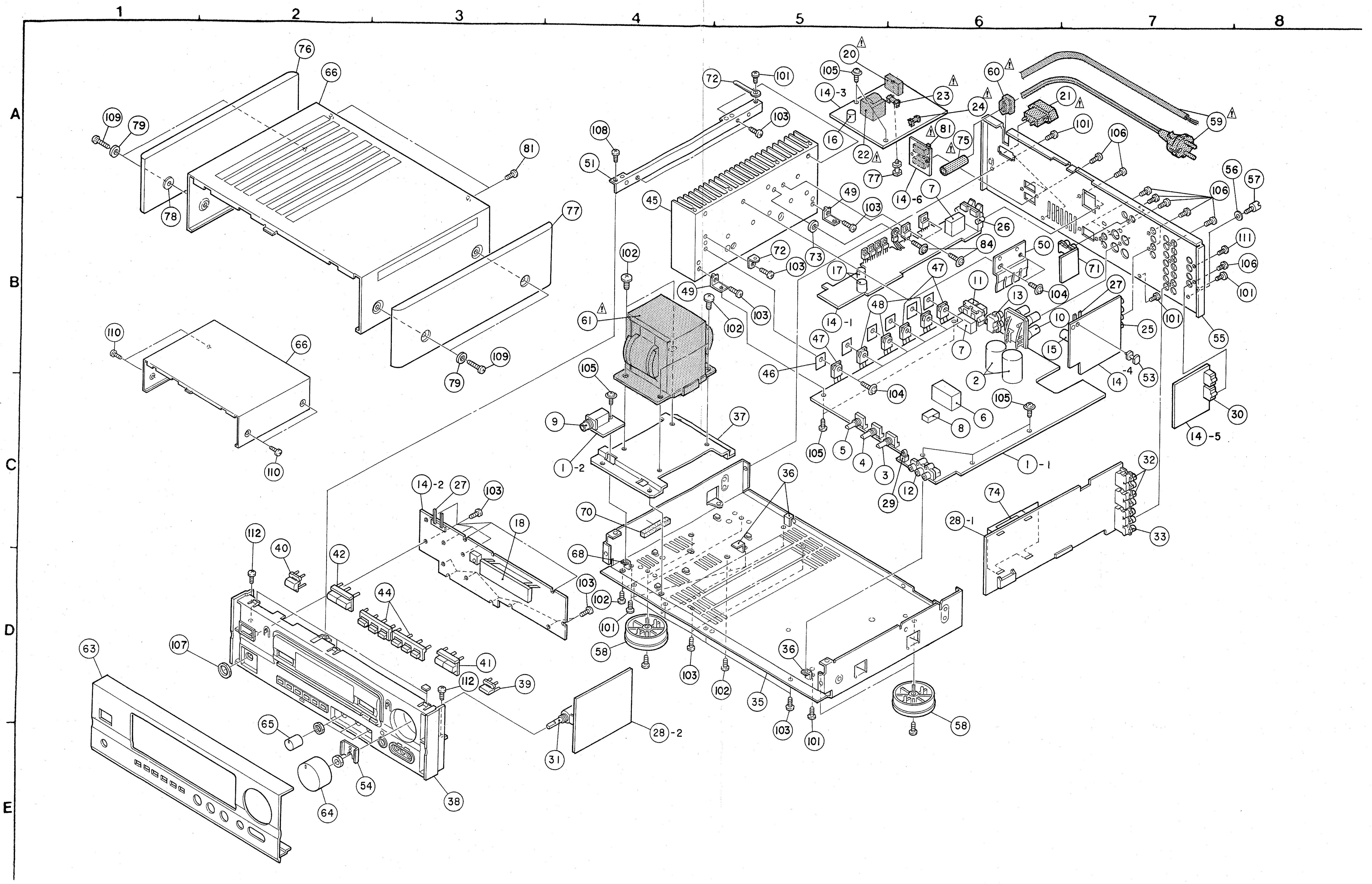
C
D
E
76
66
72
101
109
79
103
108
81
51
45
78
77
72
102
103
49
103
61
102
110
66
46
109
79
105
37
9
1-2
110
36
14-2
27
103
18
70
112
40
42
68
103
102
44
101
58
36
63
107
41
103
102
35
112
39
65
28-2
103
31
54
38
64

EXPLODED VIEW OF CHASSIS AND CABINET


1
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6
7
8
A
B
C
D
E
76
66
109
79
81
78
77
79
109
110
66
110
108
51
72
101
103
45
49
103
73
72
103
49
103
102
61 ⚠
102
105
9
1-2
37
20 ⚠
105
14-3
16
22 ⚠
23 ⚠
24 ⚠
81 ⚠
75 ⚠
77
14-6
7
26
84
17
47
48
14-1
47
46
104
11
13
10
15
7
50
71
104
2
6
8
105
5
4
3
29
12
1-1
27
25
14-4
53
14
60 ⚠
21 ⚠
59 ⚠
101
106
56
57
106
111
106
101
101
55
30
14-5
32
74
28-1
33
36
70
68
102
101
58
103
102
35
36
103
101
58
14-2
27
103
18
103
112
40
42
44
41
39
112
107
63
65
64
54
38
31
28-2

EXPLODED VIEW OF PARTS LIST

Ref. No.	Part No.	Part Name	Remarks	Q'ty
◉ 1	Note	Main Amp. Unit Ass'y		1^{S}
1-1	—	Main Amp. Unit		(1)
1-2	—	Headphone Unit		(1)
2	Note	Chemicon	C-353,354	2
3	211 0798 006	Variable Resistor 100kohm	Balance	1
4	211 0797 117	Variable Resistor 30kohm	Bass	1
5	211 0797 104	Variable Resistor 5kohm	Treble	1
6	214 9003 005	Relay		1
7	214 0167 005	Relay(G5Z-2A)		2
8	214 0162 000	Relay(A12W-K)		1
9	204 8354 004	Headphone Jack		1
10	205 0550 003	4P Terminal		1
11	205 0695 007	2P Push Terminal		1
12	204 8404 006	3P Pin Jack		1
13	205 0315 002	2P Connector Base		1
◉ 14	Note	Rear Amp. Unit Ass'y		1^{S}
14-1	—	Rear Amp. Unit		(1)
14-2	—	MFD Unit		(1)
14-3	—	Power Supply Unit		(1)
14-4	—	Video Unit		(1)
14-5	—	S-Video Unit		(1)
14-6	—	Voltage Sel. Unit		(1)
15	254 4254 792	Chemicon 2200µF/16V	C-612	1
16	254 4256 790	Chemicon 2200µF/25V	C-555	1
17	254 4259 014	Chemicon 3300µF/35V	C-517,518	2
18	393 4131 000	FLD(FIP14PM8) Ass'y	FL701	1
19	—	—		
⚠ 20	214 0120 013	Relay(TV-8)	RL551	1
⚠ 21	Note	AC Outlet		1
⚠ 22	Note	Power Trans(Mini)		1
⚠ 23	Note	Fuse A	F-001	1
⚠ 24	Note	Fuse A	F-002	1
25	204 8309 004	4P Pin Jack(C-GND)		1
26	205 0592 003	4P Push Terminal		1
27	205 0075 025	2P Terminal		2
◉ 28	1U-2617 C	Surround Unit Ass'y		1^{S}
28-1	—	Surround Unit		(1)
28-2	—	Volume Unit		(1)
28-3	—	—		
28-4	—	Tuner Input Unit		(1)
29	205 0578 001	S-Terminal		1
30	204 8414 012	2P S-Terminal		1
31	211 0637 002	Variable Resistor 100kohm	VR251	1
32	204 8313 003	4 P Pin Jack(S-GND)		2
33	204 8346 009	6 P Pin Jack(S-GND)		1
34	—	—		
◉ 35	411 1256 503	Main Chassis		1
◉ 36	412 3702 003	P.W.B Bracket		3
◉ 37	412 3715 003	Trans Bracket		1
◉ 38	Note	Inner Panel Ass'y		1
39	Note	Push Knob(P)		1
40	Note	Push Knob(P)		1
41	Note	Function Knob(B)		1
42	Note	Function Knob(B)		1
43	—	—		
44	Note	Tact Knob		2
45	417 0479 208	Power Radiator		1
46	415 0234 007	Insulating Sheet		6
47	271 0240 006	Transistor 2SA1491(O/P/Y)(Z)	TR321, 322, 411	3
48	273 0389 002	Transistor 2SC3855(O/P/Y)(Z)	TR317, 318, 410	3
◉ 49	412 3225 108	P.W.B Bracket(A)		2
◉ 50	412 3314 200	Spring Plate(A)		1
◉ 51	412 3526 302	Radiator Bracket		1
★ 52	445 0048 003	Cord Holder(L=76)		1
◉ 53	412 2814 028	Card Spacer(L=10)		1
◉ 54	412 2897 100	VR. Bracket		1
◉ 55	Note	Rear Panel		1
56	477 0018 001	Washer(P-87)		1
57	205 0071 016	Terminal Ass'y		1
58	104 0194 108	Foot Ass'y		4
⚠ 59	Note	AC Cord with Plug		1
⚠ 60	445 0056 008	Cord Bush		1
⚠ 61	Note	Power Trans		1
★ 62	445 8004 007	Wire Clamper		10
63	Note	Front Panel		1
64	Note	VR. Knob Ass'y		1
65	Note	Knob(Round)		3
◉ 66	Note	Top Cover		1
67	461 0818 002	Rubber Sheet	T10 × 10 × 60	1
◉ 68	412 3705 000	Earth Bracket		1
69	254 4250 783	Chemicon 3300µF/6.3V	C-819	1
70	232 0168 002	LC Filter		1
71	205 0274 004	2 P Connector Base		1
◉ 72	412 3724 007	L Bracket		1
73	415 0505 008	F.S. Washer		1
◉ 74	412 2814 057	Card Spacer(L=12)		1
75	415 0546 096	UL Tube(8.3)	Black	1
76	Note	Wood Board(L)		1
77	Note	Wood Board(R)		1
78	Note	Felt Sheet		4
79	Note	Washer φ 5	Black	4
80	504 0159 039	Side Pad		2
⚠ 81	Note	Slide Switch	Voltage Sel.Switch	2
82				
83				
84				
85				
86				
87				
88				
90				
SCREW				
101	473 7015 018	Tapping Screw(S) 3 × 8	Black	17
102	473 7007 000	Tapping Screw(S) 4 × 8	Black	8
103	473 7501 001	Tapping Screw(P) 3 × 10		26
104	473 8007 009	Cup Screw 3 × 12		12
105	473 8007 025	Cup Screw 3 × 8		8
106	477 0064 107	Fixing Screw		14
108	473 7500 015	Tapping Screw(S)3x8	Black	1
109	Note	Tapping Screw(S)4x20	Black	4
110	Note	3P Swelling Screw		4
111	477 0276 018	Earth Screw		1
112	477 7002 018	Tapping Screw(S)3x8		2
PACKING & ACCESORIES				
(Not included EXPLODED VIEW.)				
201	504 0092 060	Stylen Paper	for AC cord	1
202	504 9102 029	Stylen Paper	for Set	1
203	505 9102 019	Poly Cover		1
204	503 1096 004	Cushion		2
205	GEN 2487	Envelope Sub Ass'y		1^{S}
205-1	505 8006 019	Envelope		(1)
205-2	511 2541 009	Inst. Manual		(1)
205-3	Note	Inst. Manual		(1)
205-4	399 0210 004	Remote Control	RC-167	(1)
205-5	—	Battery		(2)
206	Note	Carton Case		1
207	502 0741 043	Pad	185 × 45 × T45	1
208	Note	AC Adaptor (4.8)		1
209				

ADDENDUM PARTS LIST

Ref.No.	Part Name	Part No.		
		Multiple Gold	Multiple Black	U.K. Black
◉ 1	Main Amp. Unit Ass'y (1s)	1U-2615 C	1U-2615 C	1U-2615 D
2	Chemicon C-353,354 (2)	254 4365 717 6800µF/56V	254 4365 717 6800µF/56V	254 4374 708 8200µF/56V
◉ 14	Rear Amp. Unit Ass'y (1s)	1U-2616 C	1U-2616 C	1U-2616 D
⚠ 21	AC Outlet (1)	203 3942 007	203 3942 007	—
⚠ 22	Power Trans(Mini) (1)	233 6068 002	233 6068 002	233 6071 002
⚠ 23	Fuse (F-001) (1)	206 1015 087 4A, 125V	206 1015 087 4A, 125V	206 1015 032 2.5A
⚠ 24	Fuse (F-002) (1)	206 1015 061 2A, 250V	206 1015 061 2A, 250V	— —
◉ 38	Inner Panel Ass'y (1)	146 1464 420	146 1464 433	146 1464 433
39	Push Knob(P) (1)	113 1465 050	113 1465 047	113 1465 047
40	Push Knob(P) (1)	113 1292 210	113 1292 207	113 1292 207
41	Function Knob(B) (1)	113 1631 004	113 1535 087	113 1535 087
42	Function Knob(B) (1)	113 1535 003	113 1535 016	113 1535 016
44	Tact Knob (2)	113 1454 210	113 1454 207	113 1454 207
55	Rear Panel (1)	105 1093 120	105 1093 133	105 1093 146
⚠ 59	AC Cord with Plug (1)	206 2070 005 (250V,6A C2)	206 2070 005 (250V,6A C2)	206 2024 103
⚠ 61	Power Trans (1)	233 6069 001	233 6069 001	233 6070 003
63	Front Panel (1)	144 2321 113	144 2321 126	144 2321 126
64	VR. Knob Ass'y (1)	112 0726 124	112 0569 242	112 0569 242
65	Knob(Round) (3)	112 0685 113	112 0685 100	112 0685 100
66	Top Cover (1)	102 0314 131	102 0314 128	102 0314 128
76	Wood Board(L) (1)	101 2500 005	—	—
77	Wood Board(R) (1)	101 2501 004	—	—
78	Felt Sheet (4)	124 0032 002	—	—
◉ 79	Washer φ 5 (4)	475 1006 016	—	—
⚠ 81	Slide Switch (2)	212 2611 003	212 2611 003	—
⚠ 82	AC Adapter (4.8)	202 0043 003	202 0043 003	—
83				
84				
SCREWS				
109	Tapping Screw(S)4 × 20 (4)	473 7007 039	—	—
110	3P Swelling Screw (4)	—	477 0263 005	477 0263 005
111				
PACKING & ACCESORIES				
(Not included EXPLODED VIEW)				
205-3	Inst. Manusl (1)	511 2542 008	511 2542 008	—
206	Carton Case (1)	501 1709 036	501 1709 049	501 1709 052
⚠ 208	AC Adaptor (1)	202 0043 003	202 0043 003	—
209				
210				

NOTE FOR PARTS LIST

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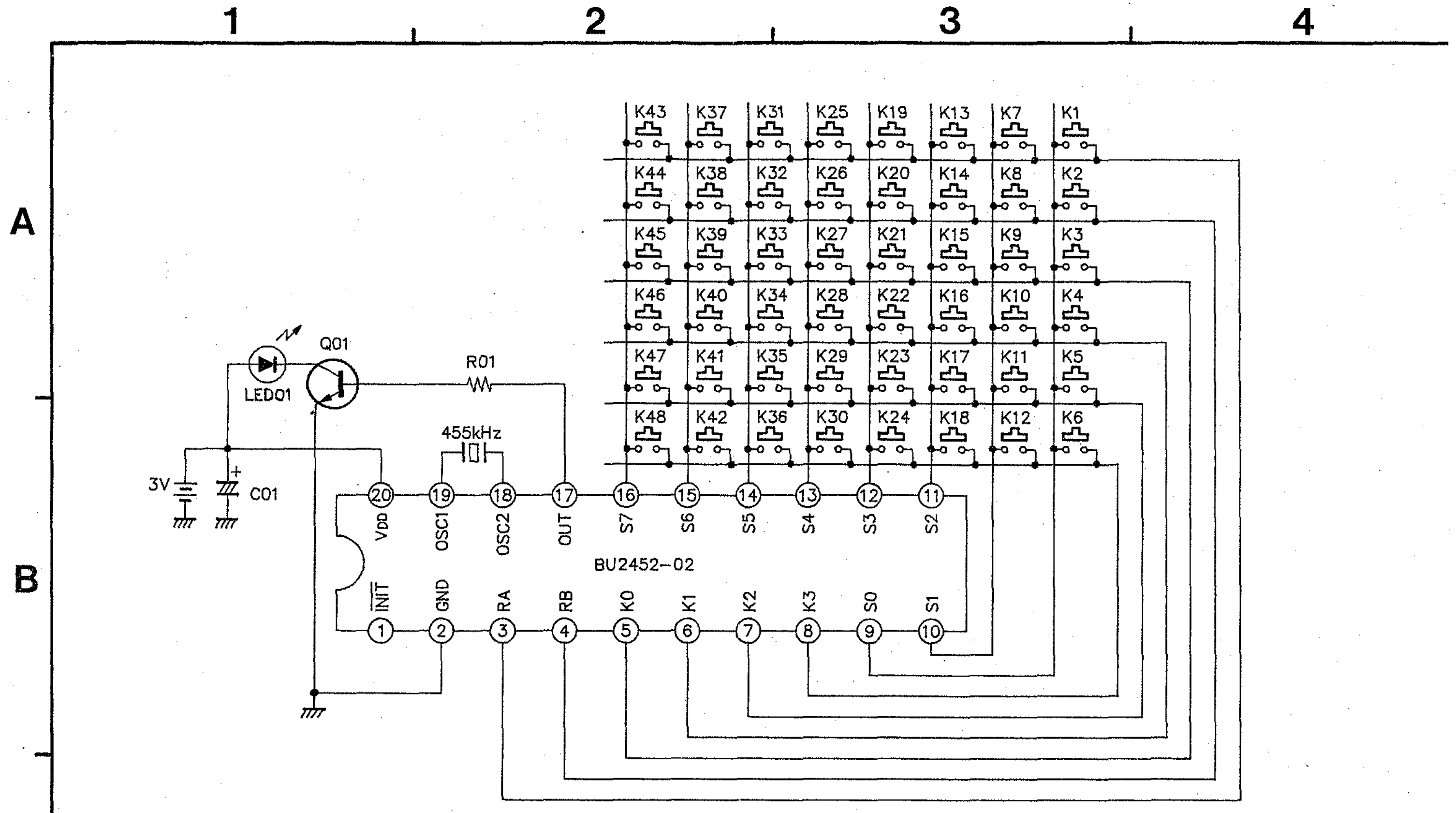
- When ordering of part, clearly indicate "1" and "I" (i) to avoid mis-supplying.
- Ordering part without stating its part number can not be supplied.
- Part indicated with the mark "★" is not illustrated in the exploded view.
- Not including Carbon Film ±5%, 1/6W, 1/4W Type in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)

WARNING:

Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

SCHEMATIC DIAGRAM (RC-167)


1
2
3
4
A
B
K43 K37 K31 K25 K19 K13 K7 K1
K44 K38 K32 K26 K20 K14 K8 K2
K45 K39 K33 K27 K21 K15 K9 K3
K46 K40 K34 K28 K22 K16 K10 K4
K47 K41 K35 K29 K23 K17 K11 K5
K48 K42 K36 K30 K24 K18 K12 K6
Q01
LED01
R01
455kHz
3V
C01
20 VDD
19 OSC1
18 OSC2
17 OUT
16 S7
15 S6
14 S5
13 S4
12 S3
11 S2
BU2452-02
1 INIT
2 GND
3 RA
4 RB
5 K0
6 K1
7 K2
8 K3
9 S0
10 S1
C

SPECIFICATIONS

1. When each Key is pressed double transmission is not performed. When one side is released from double pressed state, transmit code on unreleased side.

NOTES

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM, M=1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT CONDITION.
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

REMOTE CONTROL UNIT ASS'Y

Ref. No.	Part No.	Part Name	Remarks	Q'ty
SEMICONDUCTORS GTOUP				
IC1	—	IC BU2462-02	µ-Com	
Q1	—	Transistor 2SC3377 (Q/R)		
or	273 0195 908	Transistor 2SC2060 (Q/R)		
LED1	—	LED SE303ARF-CX/Y	Infrared	
or	—	LED SID1K10CXM	Infrared	
RESISTORS GROUP				
R1	241 2397 901	Carbon Resistor 220ohm, 1/10W	RD14B2E221J(S)	
CAPACITORS GROUP				
C1	254 4213 021	Electrolytic 47µF/6.3V	CE04W0J470M	
OTHER GROUP				
	—	(P.W. Boardd)		(1)
X1	—	Ceramic Resonator	CSB455EB	1

PARTS LIST OF EXPLODED VIEW

Ref. No.	Part No.	Part Name	Remarks	Q'ty
1		Case Top Ass'y		1
2		Panel		1
3		Switch Rubber		1
4	9H3 1000 146	Case Bottom Ass'y		1
5	9H3 1000 147	Cover Battery		1
6	—	Tapping Screw 2.6 × 12		1
7	—	Filter		1
8	9H3 1000 151	Spring Coil		1
9	9H3 1000 152	Spring Coil		1
10	9H3 1000 125	Poly Cover	85 × 250	1
11	9H3 1000 156	P.W.B. Unit Ass'y		1^S

CORDS TABLE

KEY	System address					Custom code						Extension		Mask	Judgment	Remarks	Item No.1	Item No.2	Item No.3
No.	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	K		RC-167		
K1	0	1	0	0	0	0	1	1	0	1	1	1	1	0	0	CENTER ▼	O		
K2	0	1	0	0	0	0	0	1	0	1	1	1	1	0	0	REAR ▼	O		
K3	0	0	1	1	0	1	0	0	1	0	1	0	1	0	0	MEMOLY	O		
K4	0	0	1	1	0	0	1	0	1	0	1	0	1	0	0	1	O		
K5	0	0	0	1	0	1	1	0	1	0	1	1	0	0	0	DISC SKIP	O		
K6	0	1	0	0	0	0	1	0	1	0	0	1	1	0	0	VDP/DBS	O		
K7	0	1	0	0	0	1	0	1	0	1	1	1	1	0	0	CENTER ▲	O		
K8	0	1	0	0	0	1	1	0	0	1	1	1	1	0	0	REAR ▲	O		
K9	0	1	0	0	0	0	1	0	0	1	1	1	1	0	0	MASTER VOLUME ▼	O		
K10	0	0	0	1	0	0	0	1	1	1	0	1	0	0	0	CD PLAY (▶)	O		
K11	0	0	1	0	0	0	1	1	1	1	0	1	0	0	0	DECK STOP (■)	O		
K12	0	1	0	0	0	1	1	0	0	0	0	1	1	0	0	PHONO	O		
K13	0	0	1	1	0	0	0	1	0	0	1	0	1	0	0	SET – (DELAY –)	O		
K14	0	0	1	1	0	0	1	0	0	0	1	0	1	0	0	CLEAR	O		
K15	0	1	0	0	0	1	0	0	0	1	1	1	1	0	0	MASTER VOLUME ▲	O		
K16	0	0	0	1	0	0	1	1	1	1	0	1	0	0	0	CD STOP (■)	O		
K17	0	0	1	0	0	1	1	0	0	1	0	1	0	0	0	DECK A/B	O		
K18	0	1	0	0	0	0	1	0	0	1	0	1	1	0	0	DAT/TAPE MONITER	O		
K19	0	0	1	1	0	1	1	0	0	0	1	0	1	0	0	SET + (DELAY +)	O		
K20	0	0	1	1	0	0	0	0	0	0	1	0	1	0	0	PARAMETER	O		
K21	0	1	0	0	0	1	1	1	0	0	1	1	1	0	0	BYPASS	O		
K22	0	0	1	1	0	1	1	0	1	0	1	0	1	0	0	2	O		
K23	0	0	0	1	0	0	0	0	1	1	0	1	0	0	0	AUTO SERCH + (⏮)	O		
K24	0	1	0	0	0	0	1	1	0	0	1	1	1	0	0	SURROUND MODE	O		
K25	0	0	1	1	0	1	0	1	0	1	0	1	1	0	0	PRESET ▼	O		
K26	0	1	0	0	0	1	0	1	0	0	0	1	1	0	0	TUNER	O		
K27	0	1	0	0	0	0	1	0	1	0	1	1	1	0	0	T. TONE	O		
K28	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	CD PAUSE (⏸)	O		
K29	0	0	0	1	0	1	0	0	1	1	0	1	0	0	0	AUTO SERCH – (⏮)	O		
K30	0	1	0	0	0	0	1	1	1	1	0	1	1	0	0	PANEL	O		
K31	0	0	1	1	0	0	1	1	0	1	0	1	1	0	0	PRESET ▲	O		
K32	0	1	0	0	0	0	0	0	1	1	0	1	1	0	0	VIDEO SELECT	O		
K33	0	1	0	0	0	0	0	1	0	0	0	1	1	0	0	CD	O		
K34	0	0	1	0	0	0	0	1	1	1	0	1	0	0	0	DECK PLAY (▶)	O		
K35	0	0	1	0	0	0	1	0	1	1	0	1	0	0	0	DECK FF (⏩)	O		
K36	0	1	0	0	0	0	0	0	0	1	1	1	1	0	0	MUTING	O		
K37	0	1	0	0	0	1	0	0	0	0	0	1	1	0	0	POWER	O		
K38	0	1	0	0	0	0	0	1	1	0	0	1	1	0	0	V. AUX	O		
K39	0	1	0	0	0	1	0	1	1	0	0	1	1	0	0	VCR	O		
K40	0	0	1	0	0	1	1	1	0	1	0	1	0	0	0	DECK PLAY (REV◀)	O		
K41	0	0	1	0	0	1	1	0	1	1	0	1	0	0	0	DECK REW (⏪)	O		
K42	0	1	0	0	0	0	1	1	1	0	0	1	1	0	0	VCR-2			
K43	0	1	0	0	0	1	1	0	0	1	0	1	1	0	0	DAT/TAPE-2			
K44	0	0	1	1	0	0	0	1	1	0	0	0	1	0	0	CD-DILECT			
K45	0	1	0	0	0	0	0	1	0	0	1	1	1	0	0	⏪ CENTER MODE			
K46	0	0	1	1	0	0	1	1	0	0	1	0	1	0	0	EFFECT			
K47	0	1	0	0	0	1	0	0	1	1	0	1	1	0	0	A.V.S.E			
K48	0	1	0	0	0	1	0	1	0	1	0	1	1	0	0	CINEMA			

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